Treasures

Macmillan/McGraw-Hill

Treasures

A Reading/Language Arts Program

Macmillan
McGraw-Hill

Contributors

Time Magazine, Accelerated Reader

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Treasures

A Reading/Language Arts Program

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Macmillan
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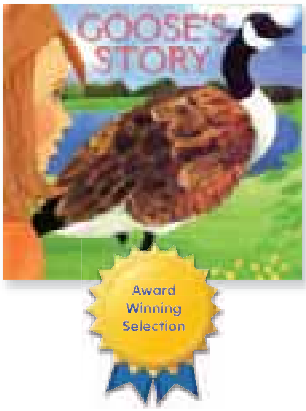
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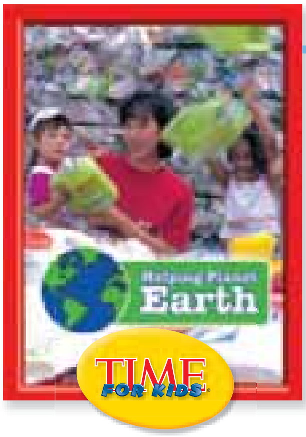
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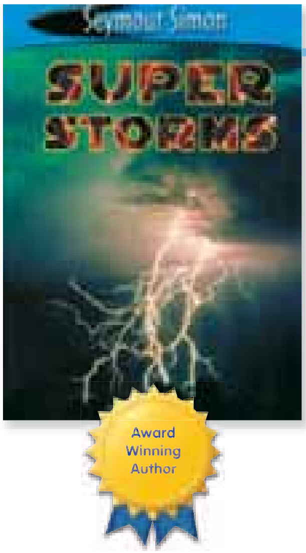
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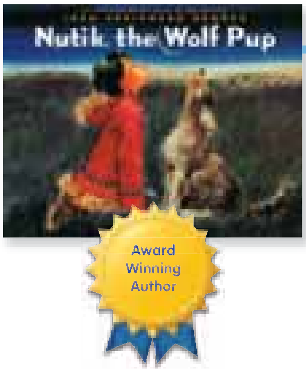
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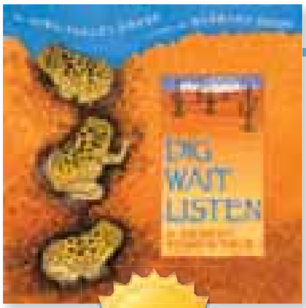

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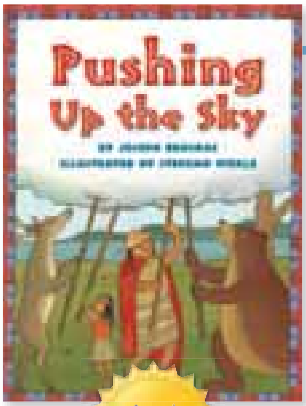

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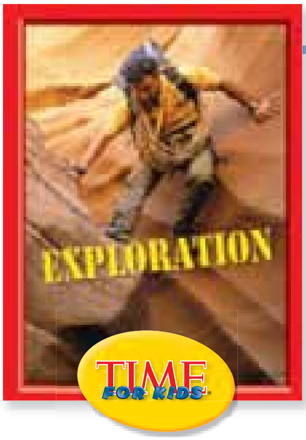

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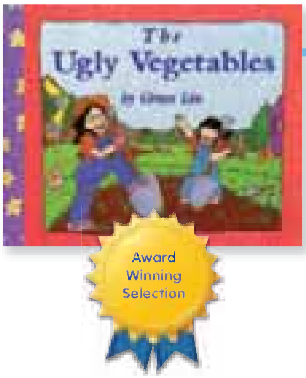
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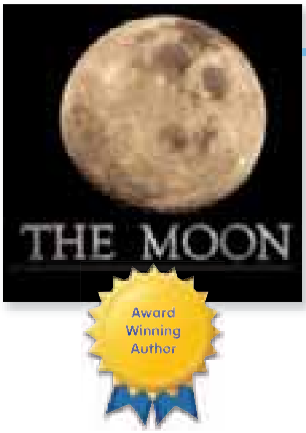
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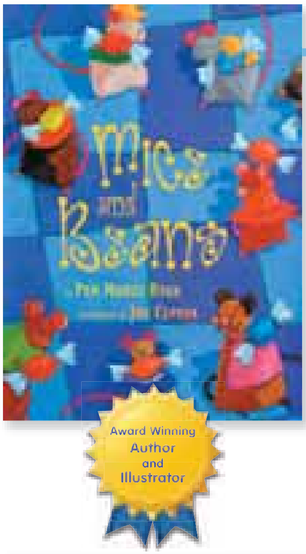
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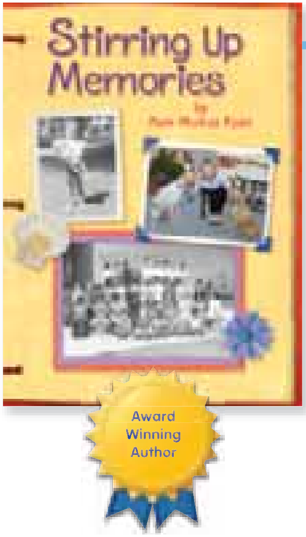
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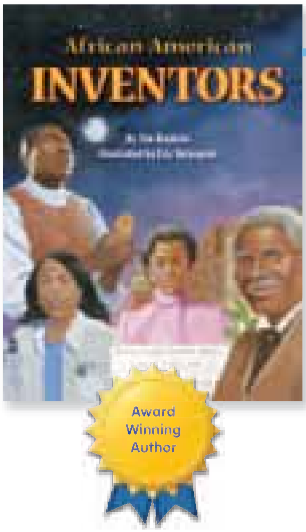
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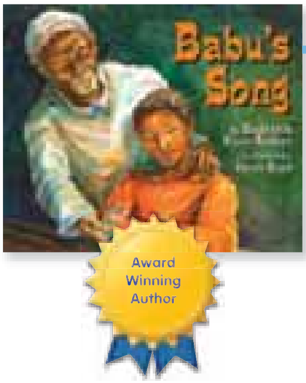
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Animal Needs

Talk About It

What do animals and humans need to live?

LOG ON Find out more about animal needs at **www.macmillanmh.com**

Animals Need to Eat

by Patty Serrano

All animals need to eat, but different **beasts** eat in different ways.

A raccoon searches for fish, nuts, and other things to eat. Raccoons wash all their food before eating it. To do this, they must live near water. Even small pools of water, like **puddles**, will do. After the raccoon washes its food, it begins to eat by taking small bites. The animal may **nibble** on an acorn once it is clean.

Vocabulary

beasts
puddles
nibble
itches
preen
handy

Word Parts

The **word endings** –*s* and –*es* can be added to make nouns plural.

beast + *s* = *beasts*

Many *beasts* live at the zoo.

A tiger hunts for the meat it eats. Eating can make a mess out of the tiger's fur. There are many places that need to be scratched. To get rid of these **itches**, the tiger bathes in a pond. Later the tiger may lie in the sun and **preen**. It carefully smooths its fur with its tongue.

A spider eats meat, too. It builds a sticky web and then hides. The web is a useful tool for the spider. Bugs get stuck in the **handy** web. Then the spider's dinner can't escape.

Reread for Comprehension

Ask Questions

Compare and Contrast

Asking questions can help you compare and contrast parts of an article. To compare means to tell how things are alike. To contrast means to tell how they are different. Reread to find out how animals get food and to compare and contrast the animals in the selection.

Animal	Animal	Animal
Behavior	Behavior	Behavior

Comprehension

Genre

A **Photo Essay** uses mostly photographs and captions to tell about a topic.

Ask Questions

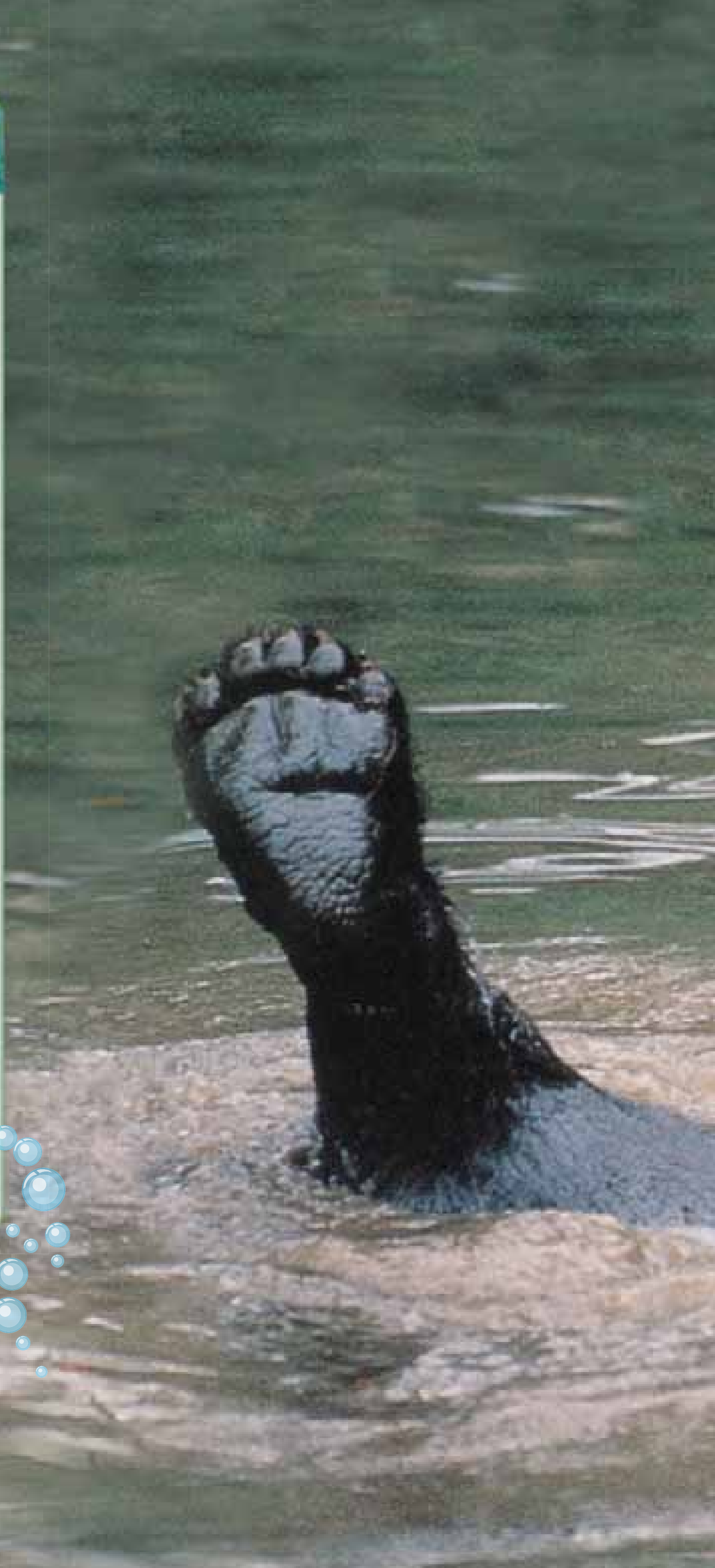
Compare and Contrast

As you read, use your Compare and Contrast Chart.

Animal	Animal	Animal
Behavior	Behavior	Behavior

Read to Find Out

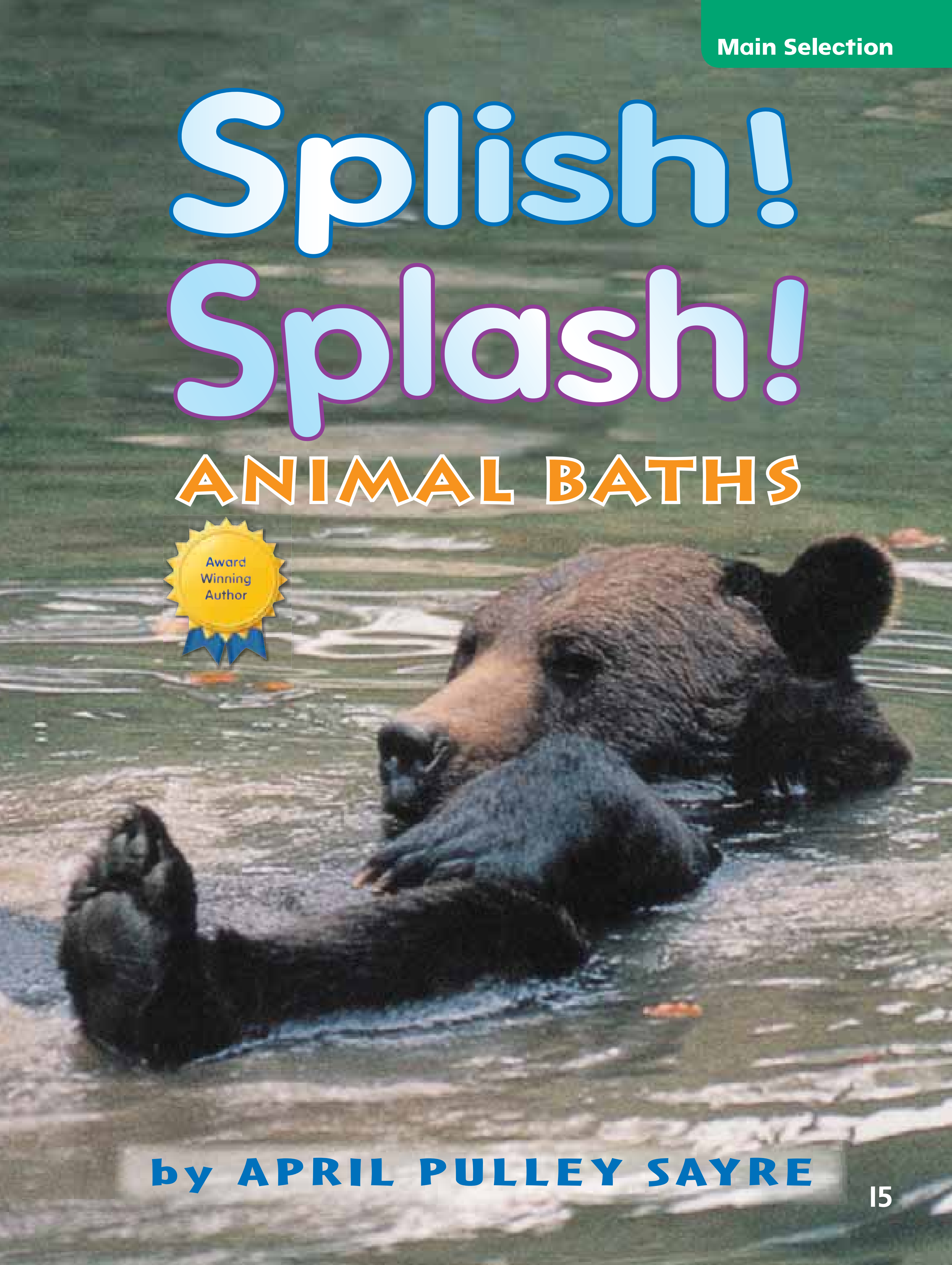
How do the different animals clean themselves?



Splish! Splash!

ANIMAL BATHS

Award Winning Author



by APRIL PULLEY SAYRE

SPLISH! SPLASH!

Take a bath.

Brush your
teeth clean.

And think of
the animals.

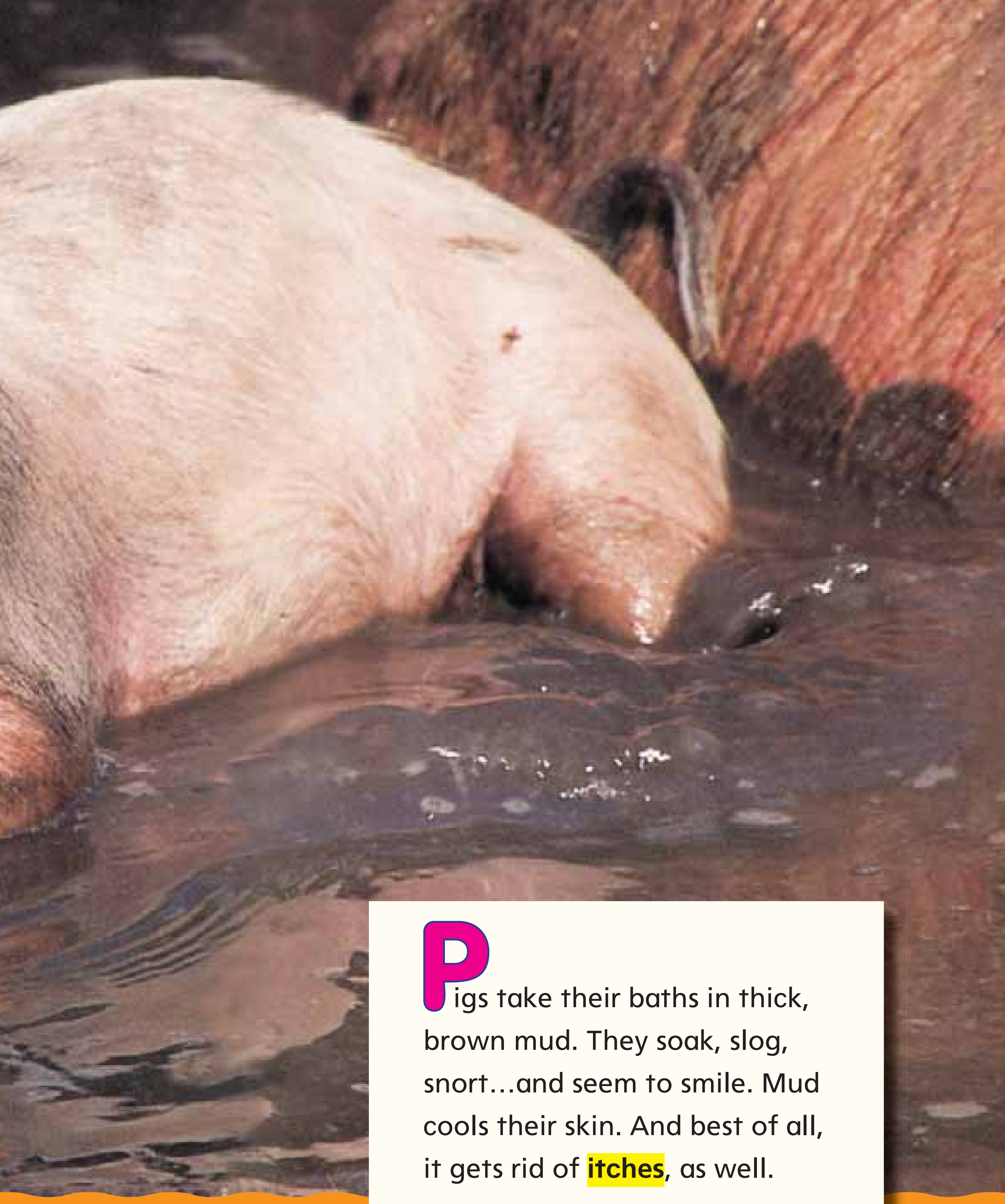
They clean
themselves, too.

Squirt!

An elephant sprays
water over its back.

Squirt!!

Baby will get a
shower, too.



Pigs take their baths in thick, brown mud. They soak, slog, snort…and seem to smile. Mud cools their skin. And best of all, it gets rid of **itches**, as well.

Birds take baths in **puddles**. Or shower under sprinklers or waterfalls.

Once clean, they **preen**—
smoothing, fluffing, and
straightening their feathers.
That's like hair brushing for you.

Compare and Contrast
What do birds do after
bathing that pigs do not?

Ducks do extra work. They spread oil on their feathers. This special oil waterproofs them. Without it, ducks would get soggy and cold… which wouldn't be *ducky* at all!

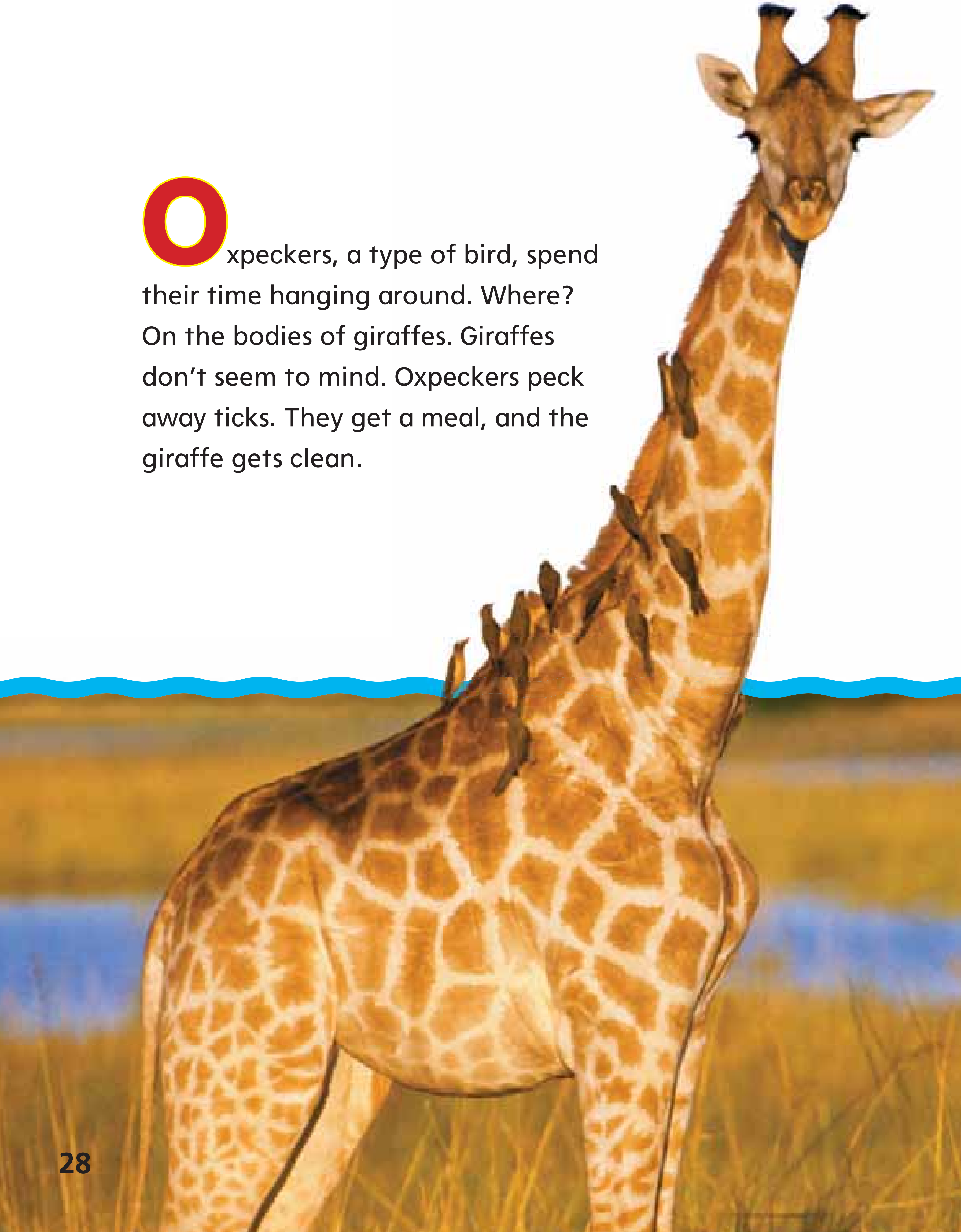
Bears have long fur that gets itchy and full of insects.
To scratch itches, a bear rubs against a tree.
Bears also take dust baths. They roll in dirt.
Or they swim and splash in a wide, cool stream.

Even the king of **beasts** can get beastly dirty. So lions do what house cats do. They lick their long fur clean. But even a lion's tongue can't reach the back of its head... so it licks a paw and rubs it over its head and ears.

A comb might come in **handy** for cleaning a chimpanzee's fur. But chimps don't have combs, so fingers work fine.

Chimps bite and pull bugs and leaves
from their family's and friends' fur.
What are good buddies for?

Oxpeckers, a type of bird, spend their time hanging around. Where? On the bodies of giraffes. Giraffes don’t seem to mind. Oxpeckers peck away ticks. They get a meal, and the giraffe gets clean.



Hippos have helpers, too. But these helpers are underwater, in the rivers and ponds where hippos wade. Fish **nibble** algae off a hippo's skin. Does it tickle the hippo? Only hippos know. And they won't say.

Fish don't take baths. They live in water. But some do try to stay clean. Big fish wait in line—not for a car wash, but for a cleaner fish.

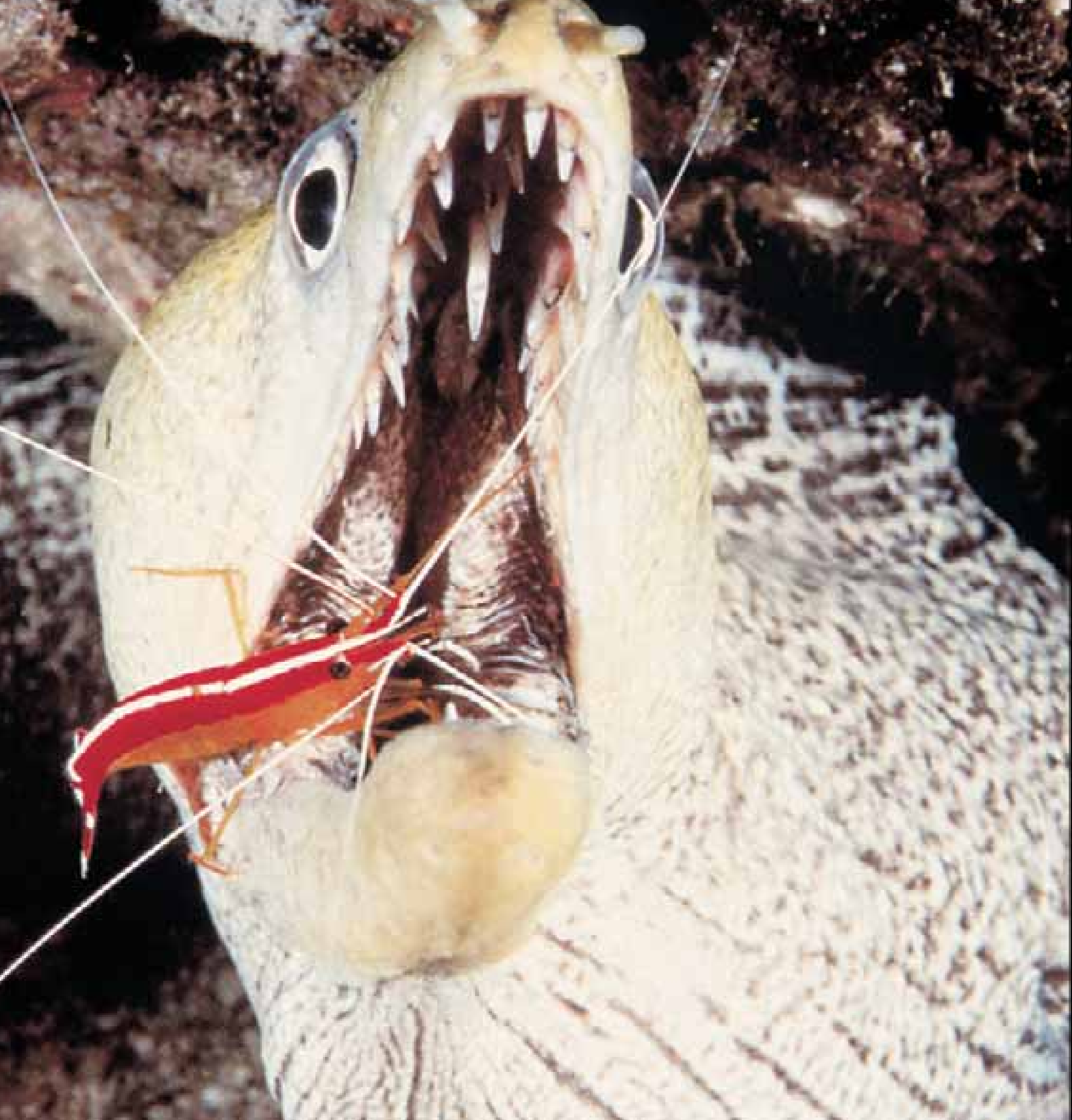
Nibble, nibble, the cleaner fish bites tiny pests off the big fish's scales. The big fish gets clean. The cleaner fish gets a meal. Now that's an amazing deal!

Compare and Contrast
How do some animals use help from another animal to stay clean?

Nearby, a shrimp crawls into a moray eel's mouth.

Will it become a shrimp dinner? Not this time. It's a cleaner shrimp—an animal dentist.

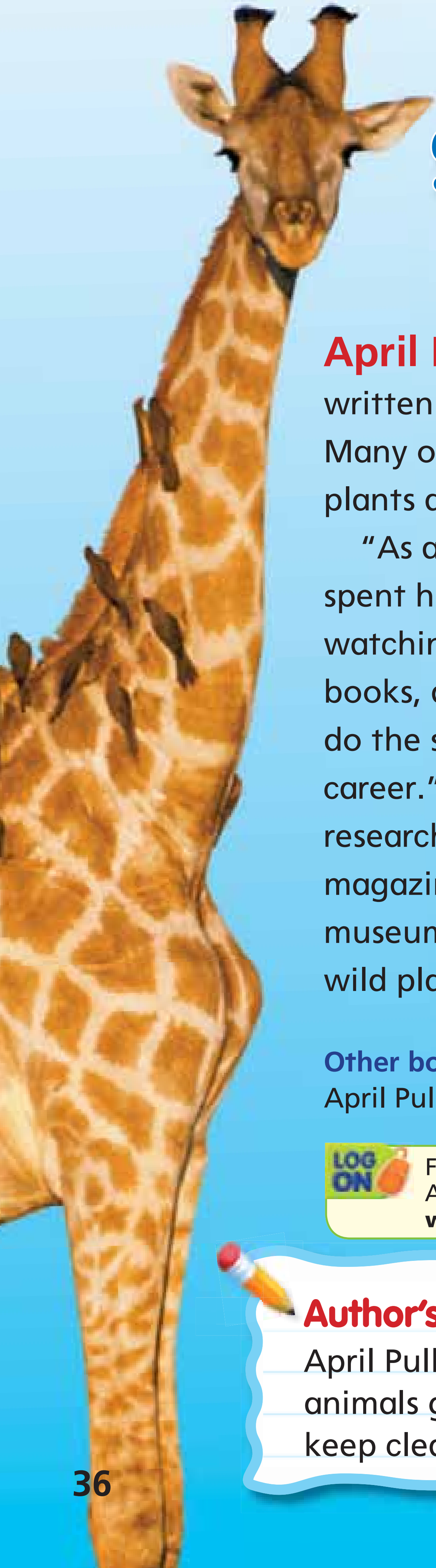
It picks and eats food off the moray's teeth. Instead of being a shrimp dinner, it's dinnertime for this shrimp!



Now that you've heard
about animal baths and animal
dentists, and how animals splish,
splash, peck, and preen...
it's time to take *your* bath.

Splish and splash.

And think of the animals.
They, too, are getting clean.



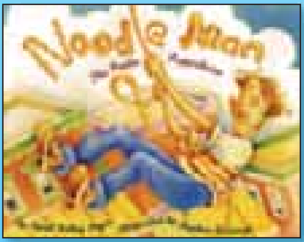
Splish! Splash!

April Has Fun on the Job

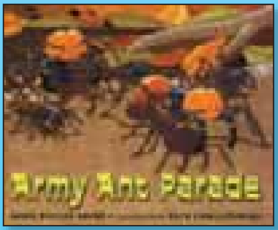
April Pulley Sayre has written more than 50 books. Many of them are about plants and animals.

"As a child," April says, "I spent hours picking flowers, watching insects, reading books, and writing. Now I do the same thing, only as a career." April's favorite part of the work is researching. She likes reading books and magazines, calling people, and visiting museums, parks, and wild places.

Other books written by April Pulley Sayre



Noodle Man



Army Ant Parade

LOG ON Find out more about April Pulley Sayre at **www.macmillanmh.com**

Author's Purpose

April Pulley Sayre wanted to show how animals get clean. Write about how you keep clean.

Comprehension Check

Retell the Story

Use the Retelling Cards to retell the selection.

Retelling Cards

Think and Compare

1. How are all of the animals alike in this selection? How are they different? **Ask Questions: Compare and Contrast**

Animal	Animal	Animal
Behavior	Behavior	Behavior

2. Reread pages 26–27. Why might a comb come in handy for a chimp to clean its fur? **Analyze**

3. Which animal do you think bathes in the most unusual way? Why? **Evaluate**

4. Why do animals need to keep clean? **Apply**

5. How is "Animals Need to Eat" on pages 12–13 like *Splish! Splash!* ? How is it different? **Reading/Writing Across Texts**

Ant and Grasshopper

based on Aesop's Fable

Language Arts

Genre

Plays are stories that can be acted out.

Literary Elements

Setting refers to the time and place of the play.

Characters refer to the individuals or persons in the play.

Characters: Narrator, Ant, Grasshopper

Setting: a meadow with an ant hill in the summer

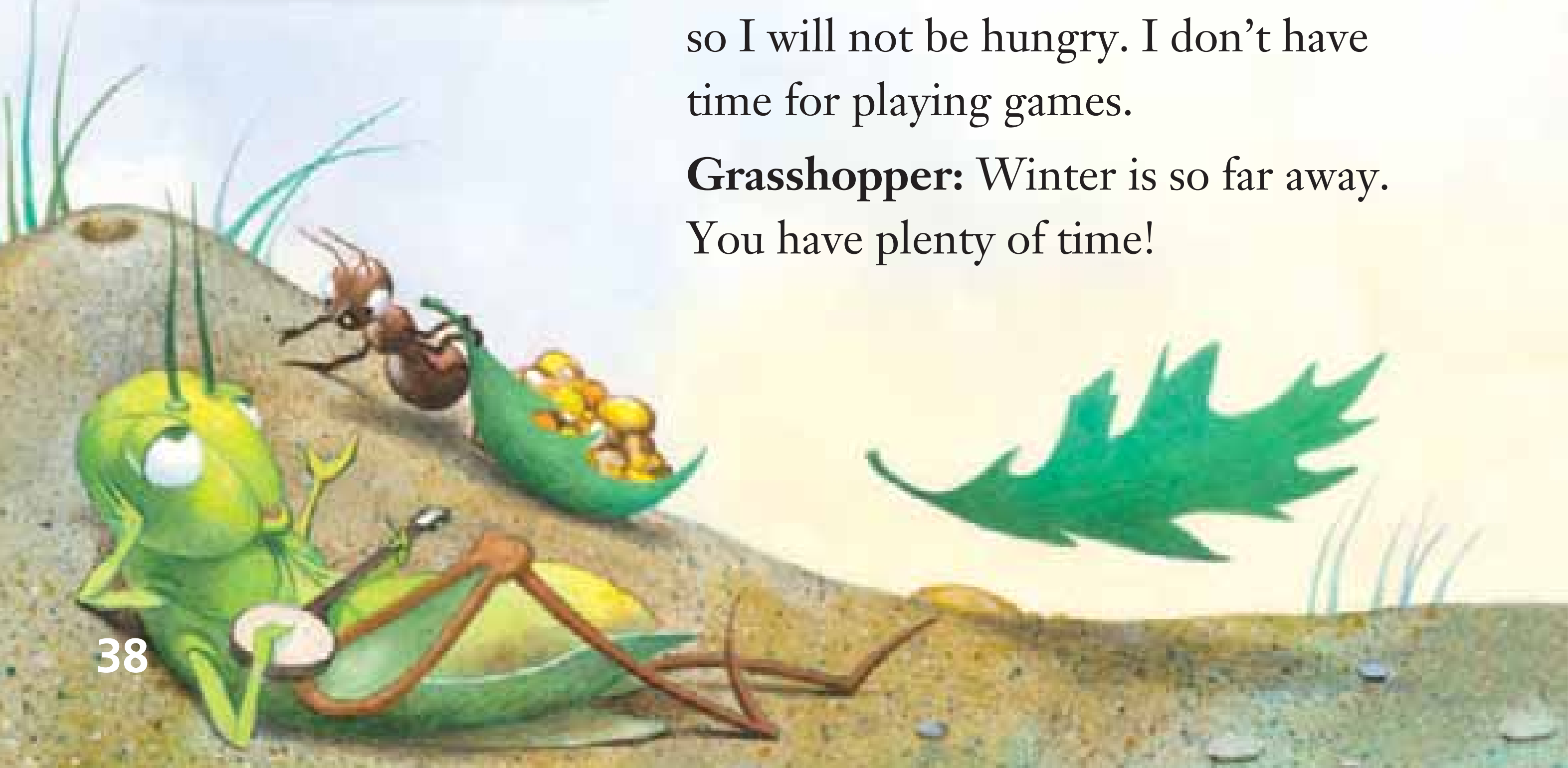
Scene 1

Narrator: It was summer in the meadow. Most of the insects were working hard to gather food.

Grasshopper: What a beautiful summer day! Ant, why are you working so hard? Come play leaf hop with me!

Ant: I am putting away food for winter so I will not be hungry. I don't have time for playing games.

Grasshopper: Winter is so far away. You have plenty of time!

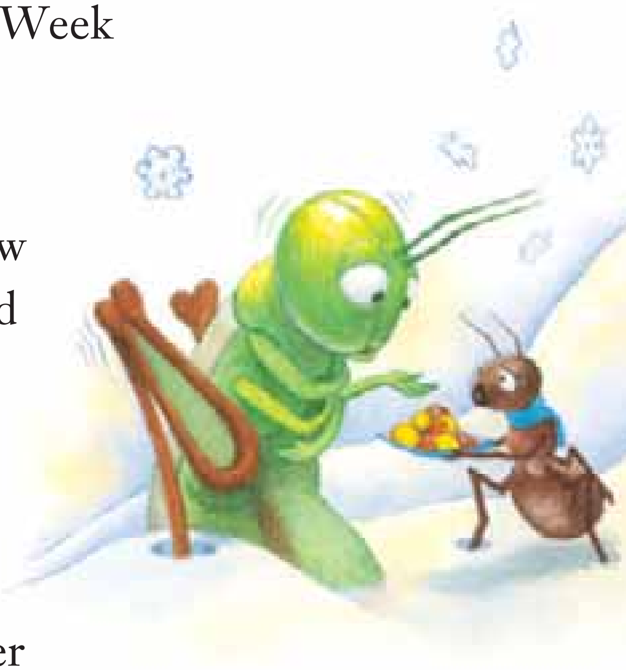


Ant: Winter lasts as long as summer. You have to be ready! I think you should save some food.

Grasshopper: I'll do it next week. There is no rush.

Narrator: Week after week, Ant worked. Week after week, Grasshopper played leaf hop.

Scene 2



Narrator: Soon winter came. The meadow was covered with snow. There was no food to be found.

Grasshopper: Ant, please help me. I am cold and hungry.

Ant: Oh Grasshopper, you did not plan. I will give you some food, but next summer you must gather food for yourself.

Narrator: Ant gave Grasshopper some food. Ant also taught Grasshopper an important lesson!

Connect and Compare

1. Why is the setting of the play important to the action? **Setting**
2. Think about the play and the story *Splish! Splash!* How do the animals in both selections meet their needs? **Reading/Writing Across Texts**

LOG ON Find out more about fables at **www.macmillanmh.com**

Write a Summary

Writer's Craft

Topic Sentence

A **topic sentence** is at the beginning of a paragraph. It tells the reader the main idea of the paragraph. The other sentences give supporting details.

① Notes

Chimpanzees, Africa,

② Notes

rocks
sticks

③ Notes

take leaves off the sticks, poke sticks in termite hill, eat insects off stick

Chimps Use Tools

by Jewel W.

Chimps use simple tools to get food. In Africa, they use rocks to crack open nuts. Chimps can also use sticks to get and eat termites from termite hills.

I wrote a good topic sentence about my main idea.

My summary includes correct capitalization and punctuation.

Your Turn

Write a summary about animal needs or behaviors. Find out facts about the topic. Look at reference books, the Internet, or other resources. Take notes on what you find out. Use your notes to write a summary. Use the Writer's Checklist to check your writing.

Writer's Checklist

- ☐ **Organization:** Did I write a good topic sentence?
- ☑ **Ideas:** Does my summary tell the important ideas with no extra details?
- ☑ **Conventions:** Did I capitalize the first word in each sentence and any proper nouns? Is my punctuation correct?
- ☑ **Organization:** Is my summary just one to three sentences long?

Your Turn

Write a summary about animal needs or behaviors. Find out facts about the topic. Look at reference books, the Internet, or other resources. Take notes on what you find out. Use your notes to write a summary. Use the Writer's Checklist to check your writing.

Writer's Checklist

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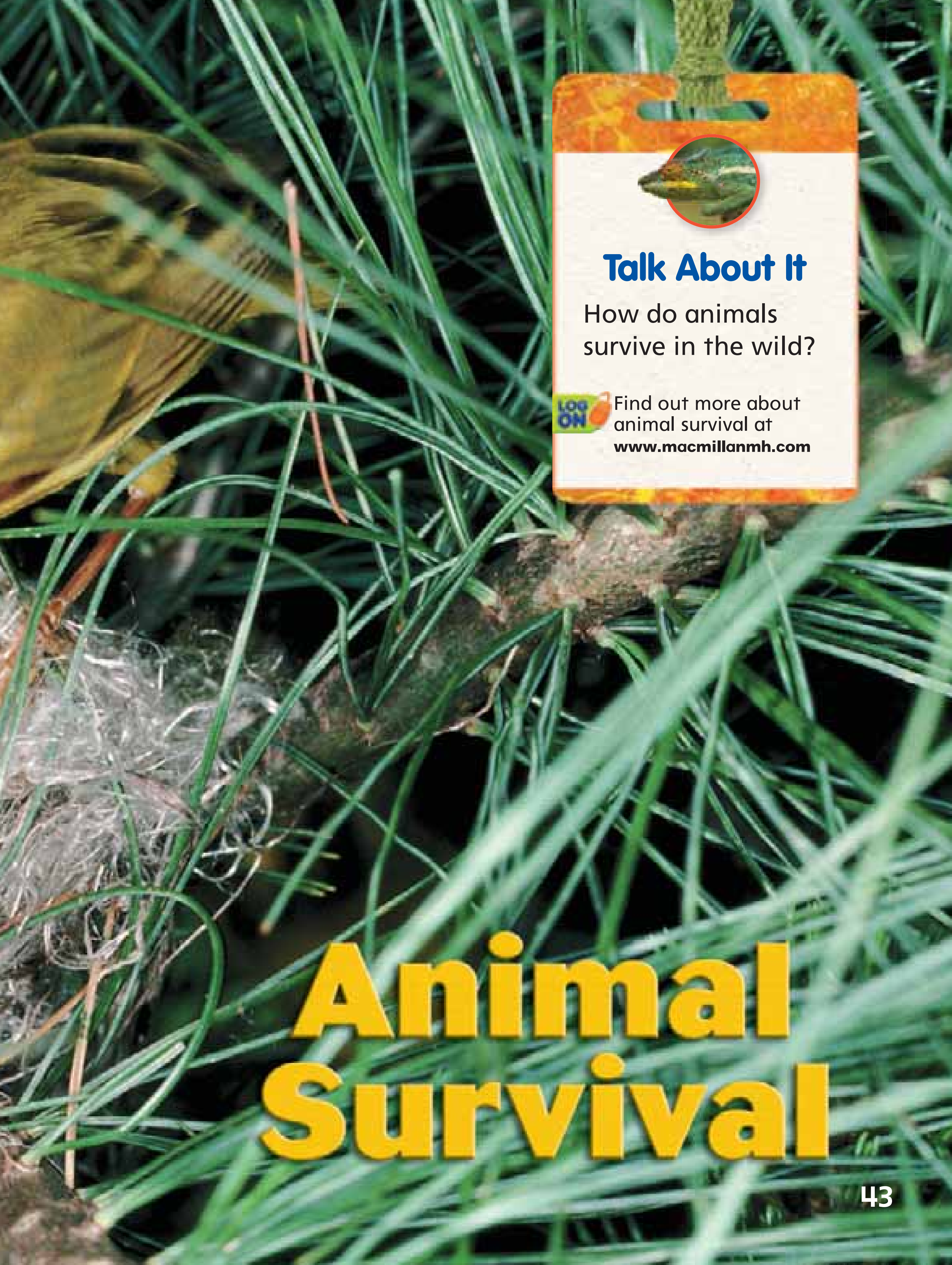
- ☑ **Organization:** Is my summary just one to three sentences long?



Animal Survival

Talk About It

How do animals survive in the wild?

LOG ON Find out more about animal survival at **www.macmillanmh.com**

Vocabulary

imagine
deserted
balance
wider
freezes
saddest

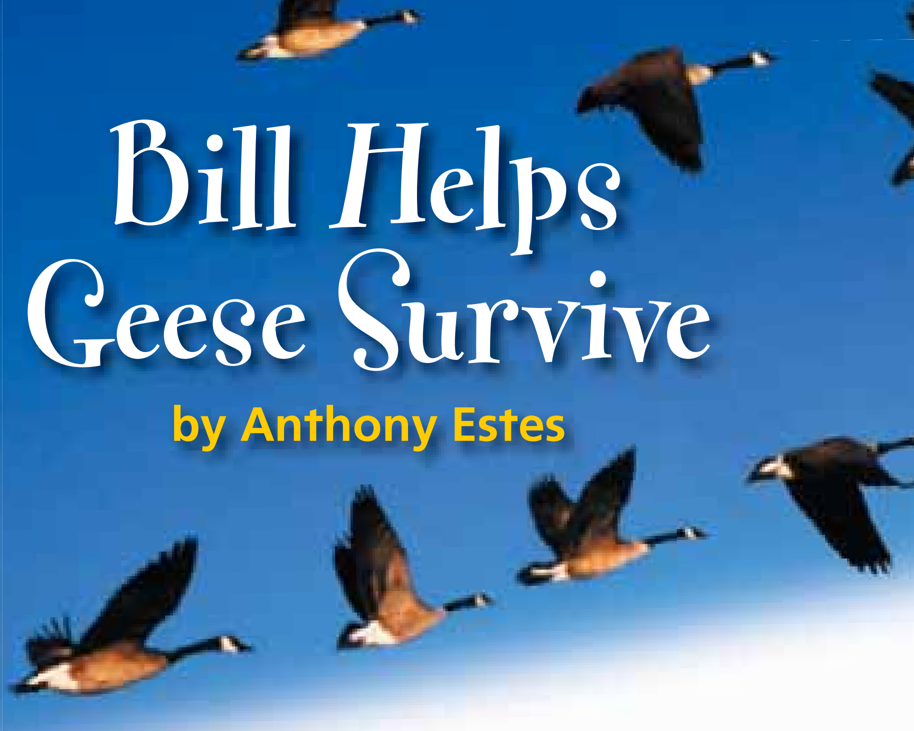
Word Parts

A **comparative** is a word that compares two things. It may end with *–er*.

A **superlative** is a word that compares three or more things. It may end with *–est*.

Joe is *sadder* than Jim.

Joe is the *saddest* boy of all.



Bill Helps Geese Survive

by Anthony Estes

As a boy, Bill pictured himself flying. In his mind, he would **imagine** soaring through the sky with the birds. Bill never gave up his dream. He learned to fly airplanes.

One day, Bill found a nest of young geese. They were **deserted**. Their mother had gone away and left the babies. Bill took the geese home and cared for them.

Soon the geese learned to fly. A few had trouble with their **balance**. They would flop from side to side. At first, the geese only flew around Bill's yard.

Then, the geese flew over more land. When the geese learned to fly over a **wider** area, Bill decided they needed a safe place to live.

Fall was coming. The ground where Bill lives **freezes** early. Soon the ground would be too cold for the geese to live. Bill didn't want the geese to die. It would be the **saddest** thing to happen. Bill would feel very unhappy.

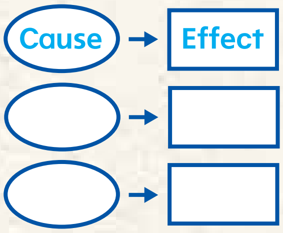
Bill decided to lead the geese south, where it is warmer. They could follow his plane. His plan worked. At last, Bill was able to fly with the birds.

Reread for Comprehension

Ask Questions

Cause and Effect

Asking questions is one way to figure out the cause and effect of events in an article. A cause is why something happens. An effect is what happens. Reread the article and use the chart to help you identify the cause and effect of events.



Comprehension

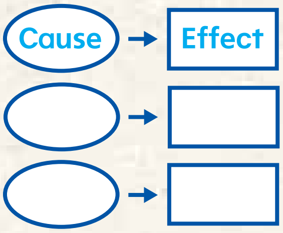
Genre

Realistic Fiction is a made-up story that could happen in real life.

Ask Questions

Cause and Effect

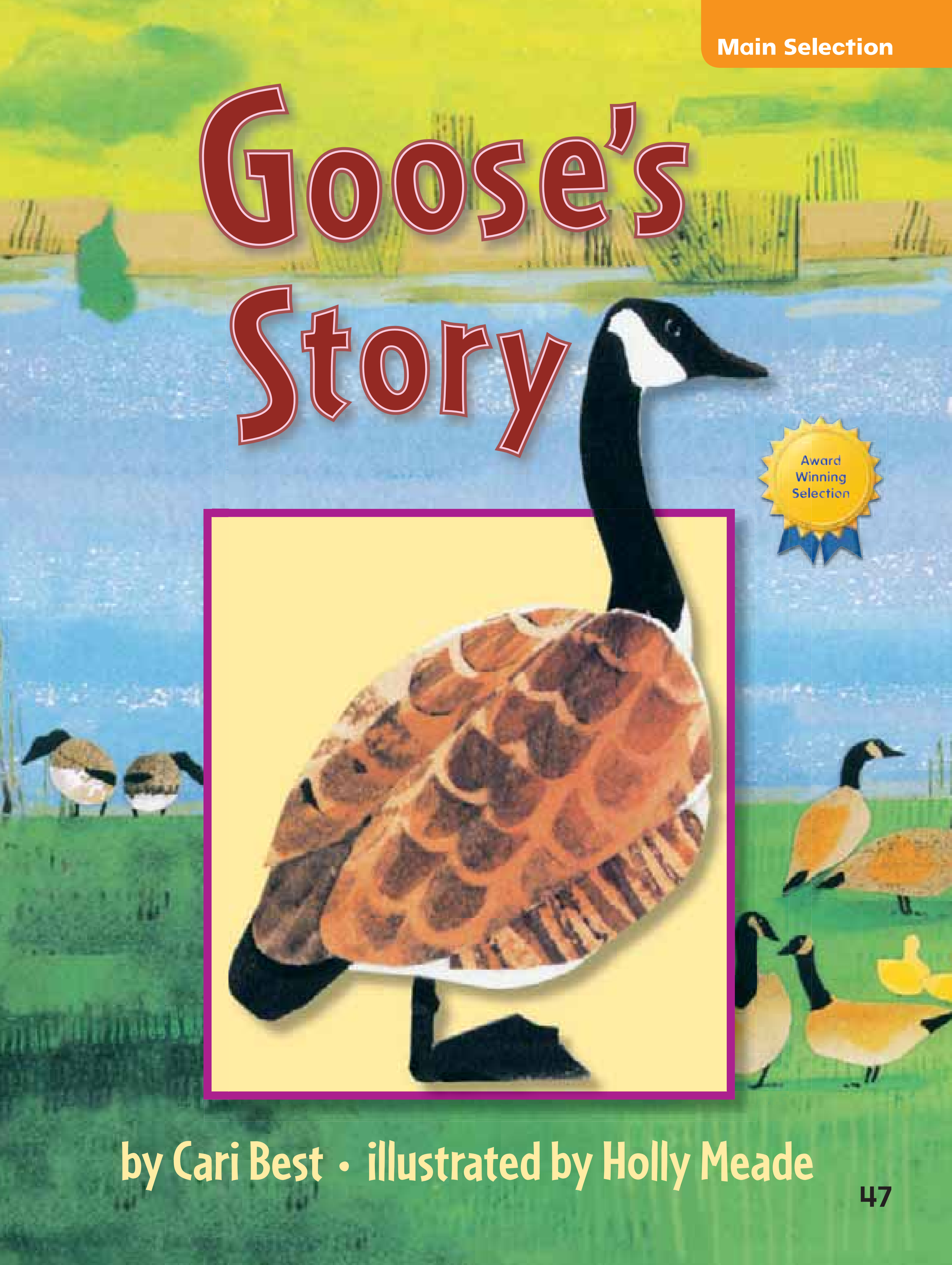
As you read, use your Cause and Effect Chart.



Read to Find Out

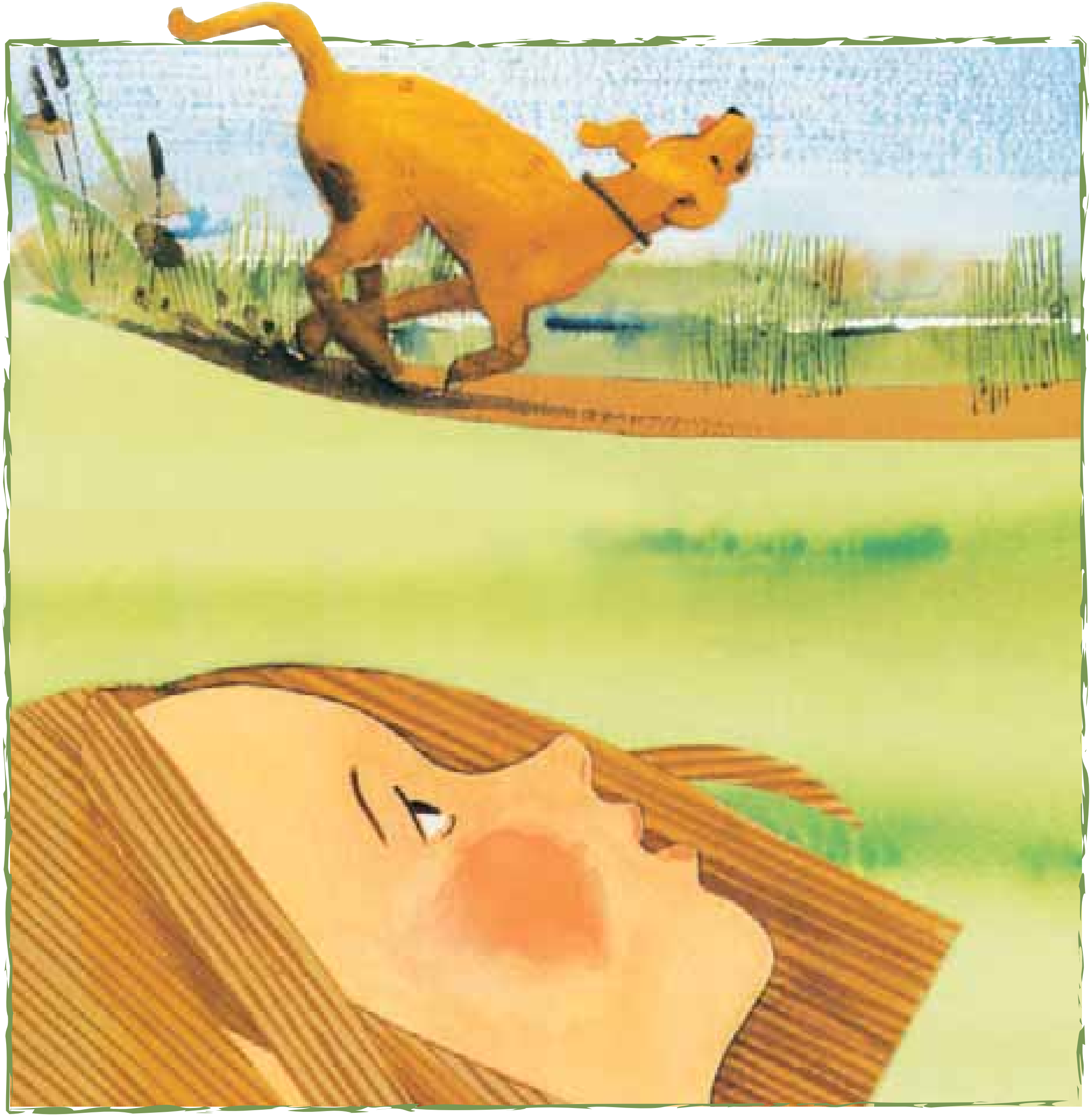
What happens to the goose and how does it affect her life?

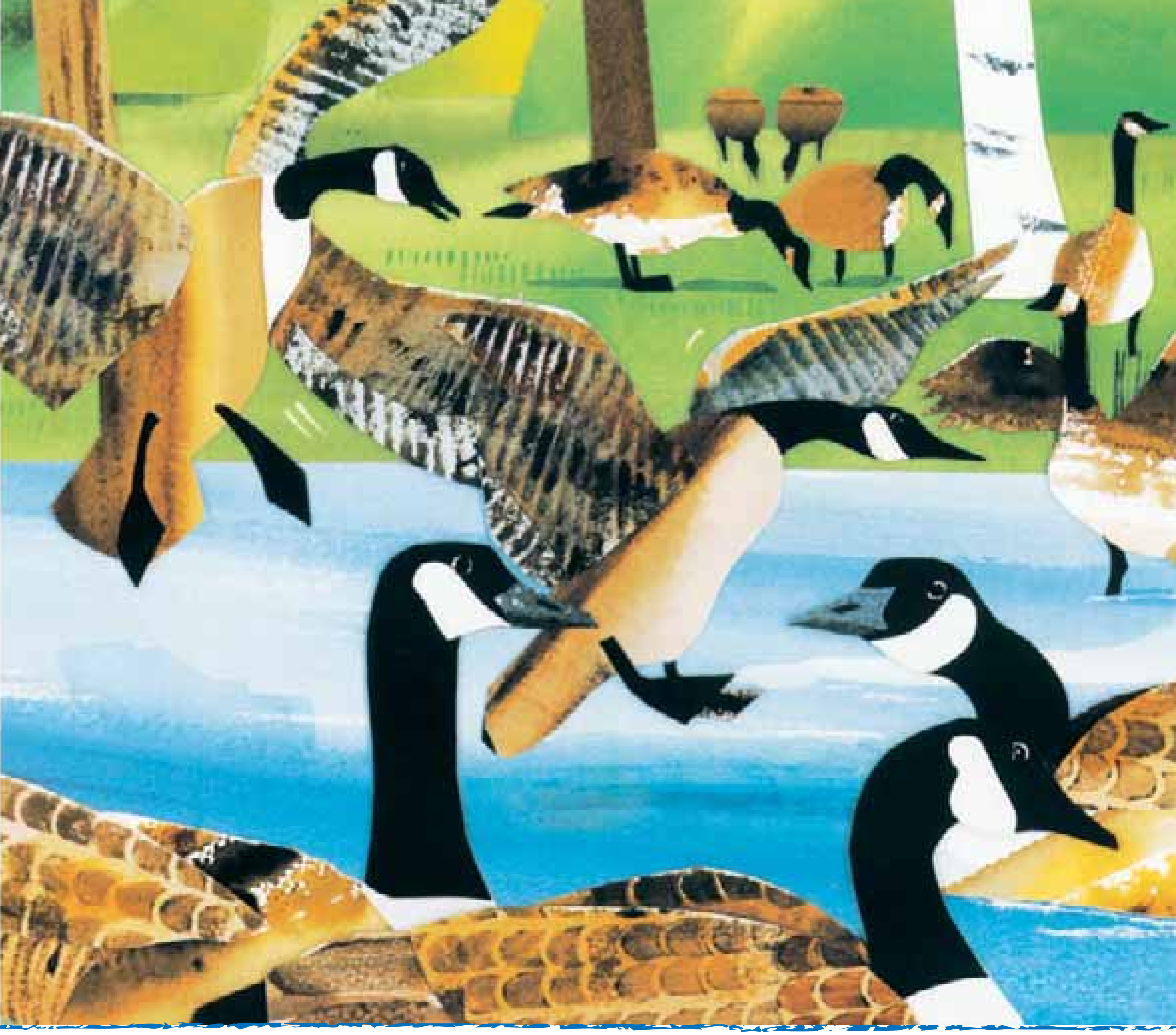
Goose's Story


Award Winning Selection

by Cari Best • illustrated by Holly Meade

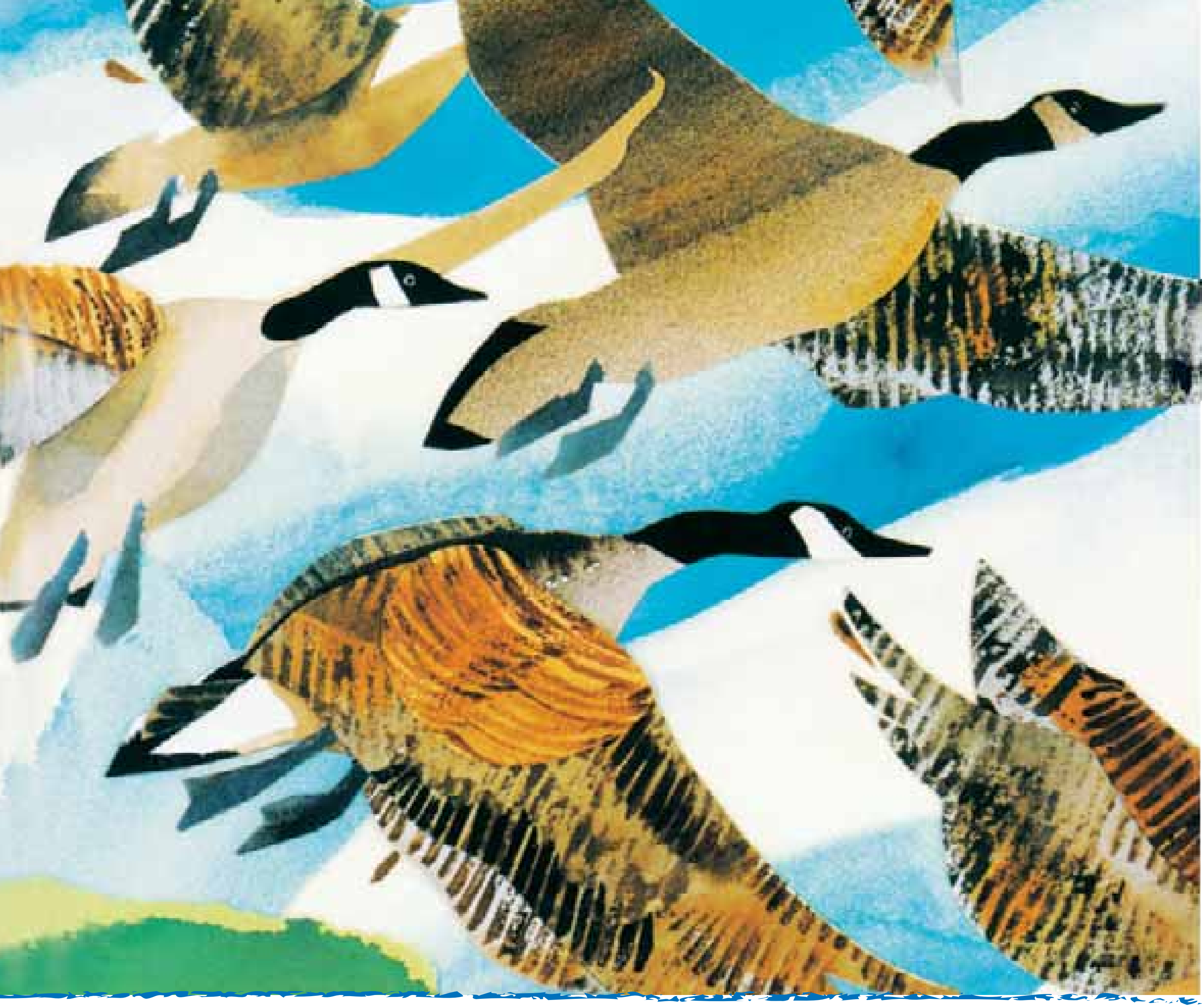
Henry hears the honking first. He circles the pond, around and a half, sending up splashes of warm spring mud all over his winter coat. Henry knows the geese are coming. And then I know it, too.





They land in couples and stand in threes and band together in bunches like people. Old geese, young geese, grandmas, uncles, cousins, and nieces. Each one painted in black and white and gray and brown.

Some geese sit and some geese sleep. Some drink and bathe and swim and sun. Pecking and nibbling, they celebrate spring. All afternoon.



Then Henry breaks free to take back his pond. And the Sunday geese jump for the sky. Their wings spread **wider** than my arms can reach. Their legs tuck under like airplane wheels. There is honking and barking—and giggles from me.

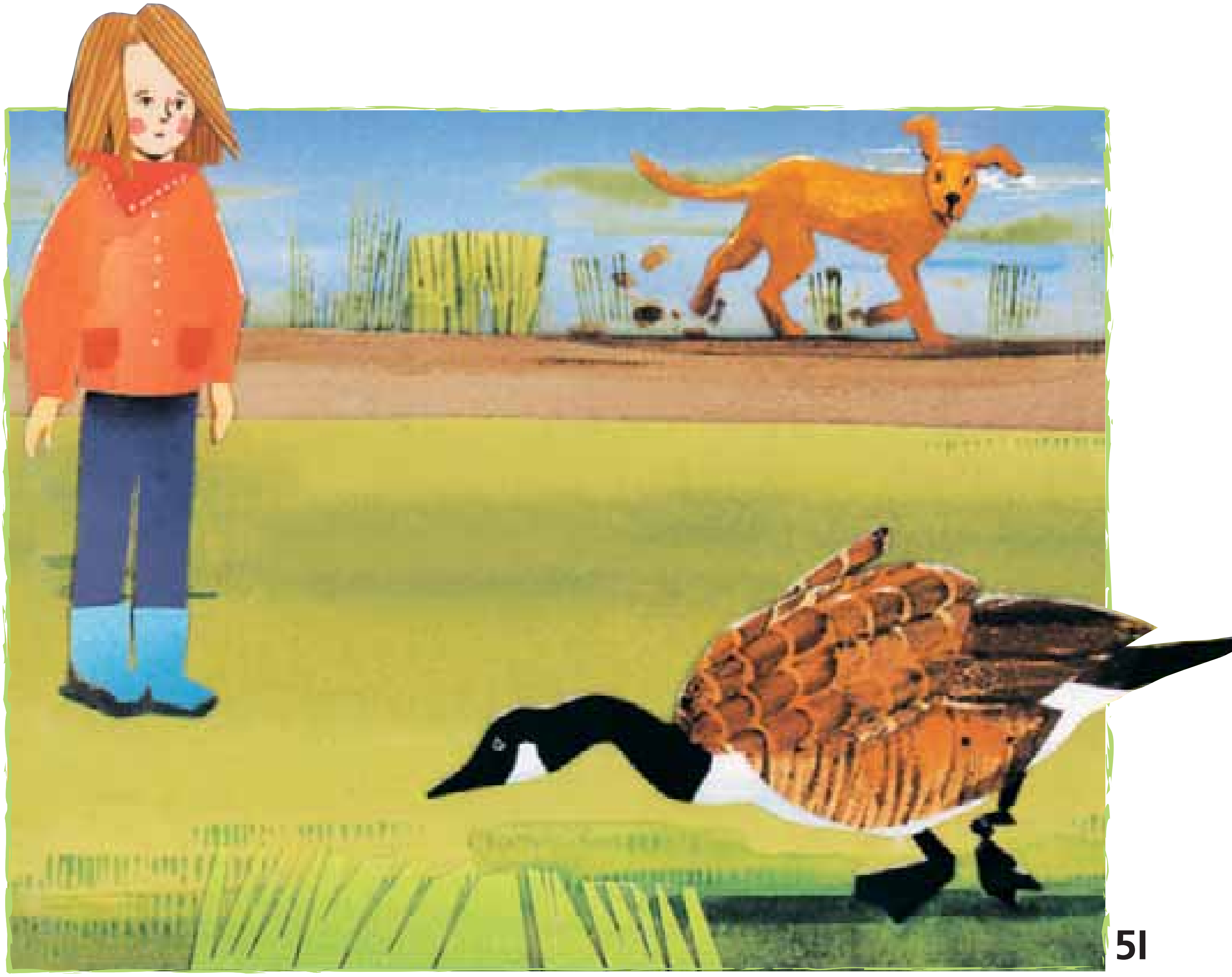
Until I see her. One goose alone. She doesn't flutter her feathers or hiss at Henry. She doesn't stretch out her neck. And she doesn't fly away.

"Go!" I shout and stamp my boots. But the goose doesn't move.

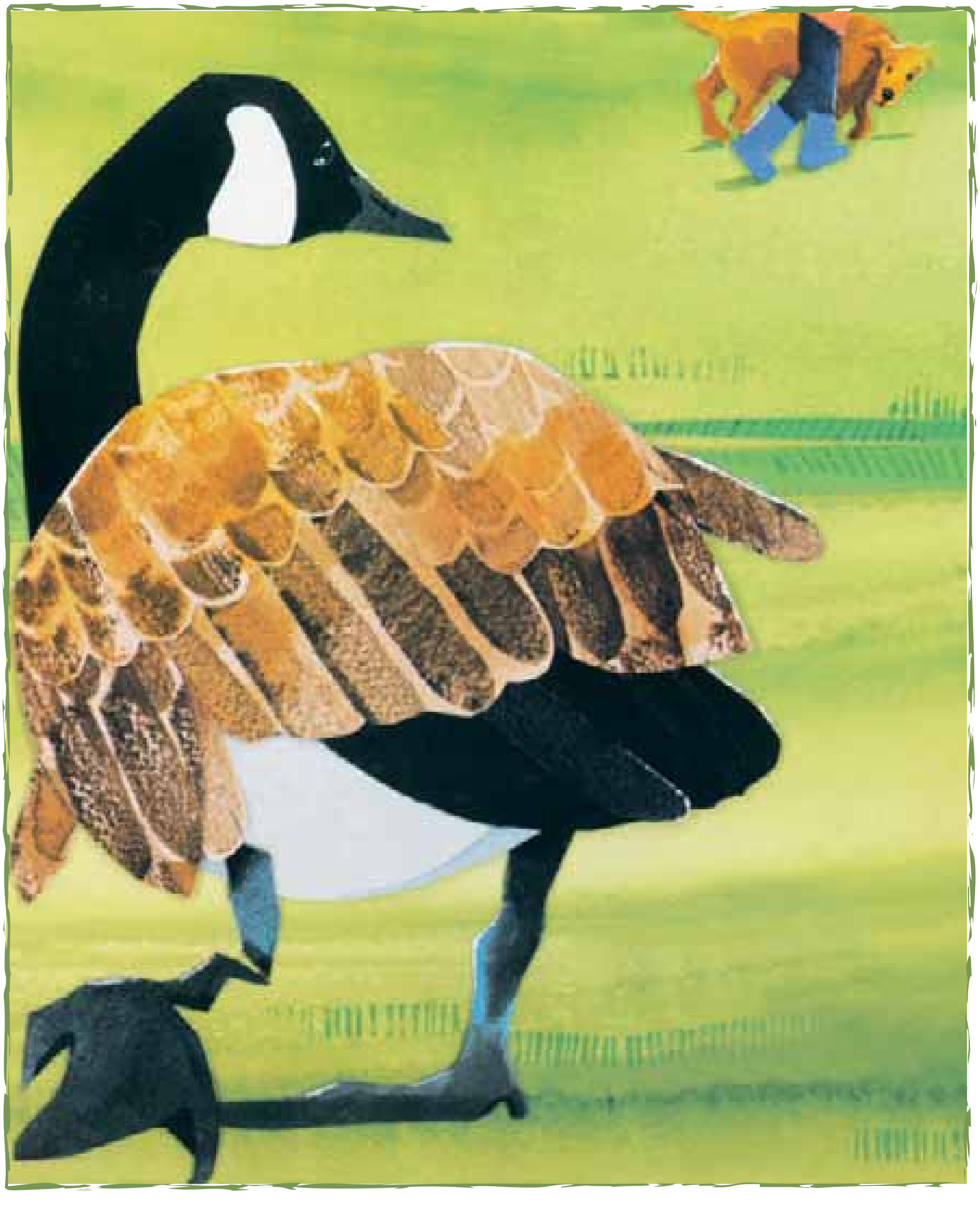
She stares at us and we stare at her. First at what is right about her. And then at what is wrong.

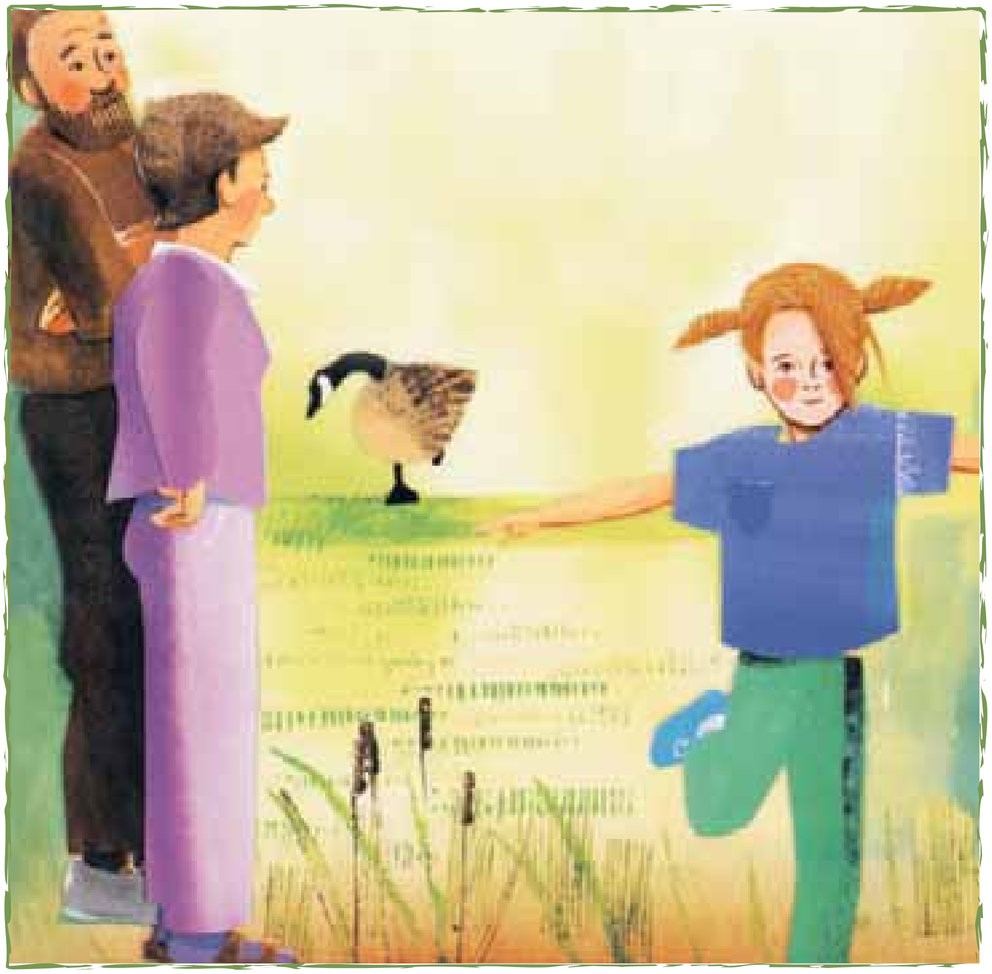
"It's your foot!" I whisper. And then I can't move either.

My heart is thumping so loud I'm sure she can hear it. "Oh, goose," I say, "what happened to you?"



I want to stay and watch her. Make sure she's all right. But I might scare her even more. And I'm scared, too. So I lead Henry toward our house. To Mama and Papa inside.





The next day when I see the goose, her foot is gone. I feel the **saddest** I've ever felt. I stand on one foot myself, fixing my eyes on the geese at the other side of the pond. Losing my **balance** when I've counted to thirty-seven.

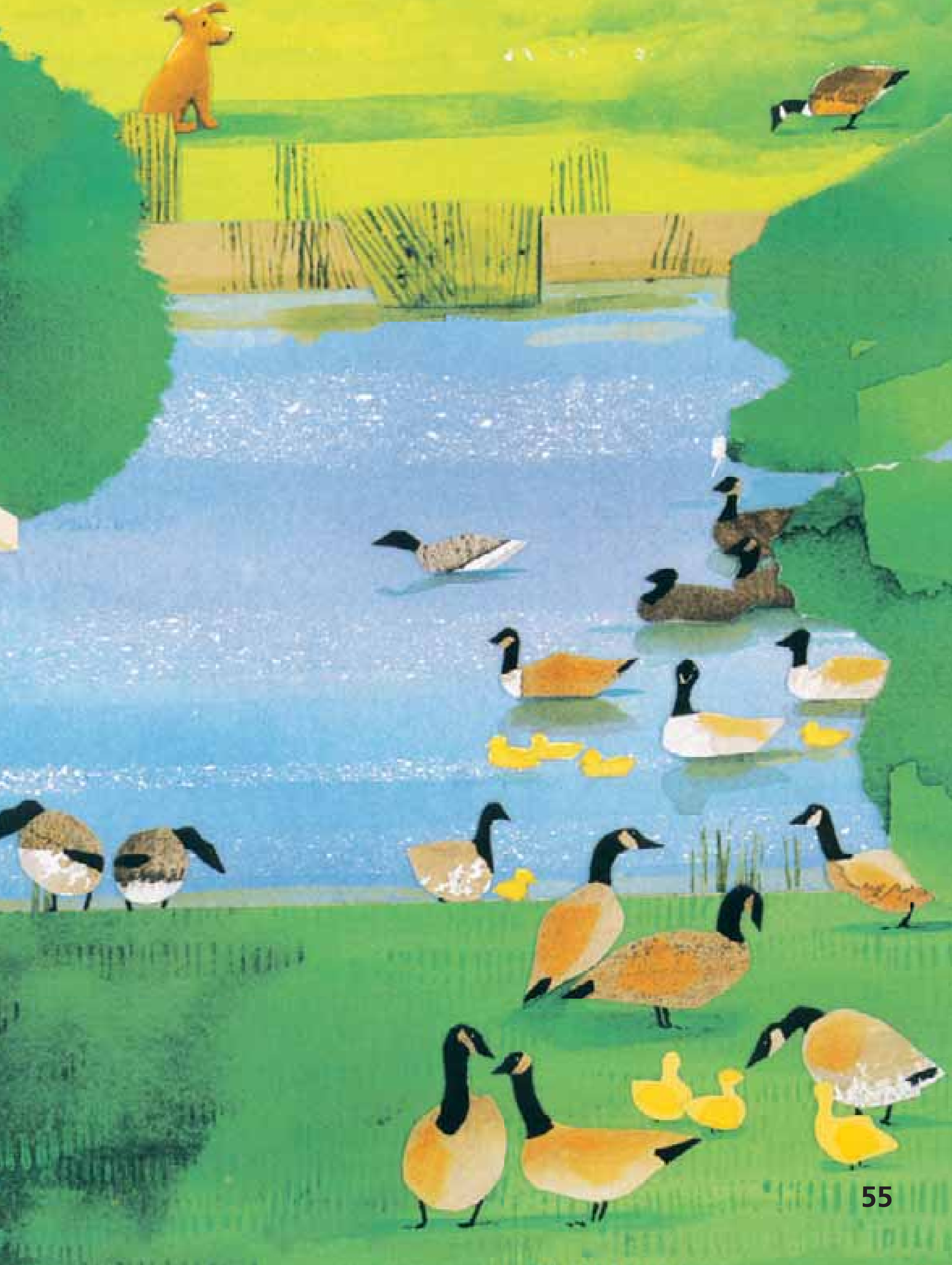
"Unlucky goose," says Papa, looking away.

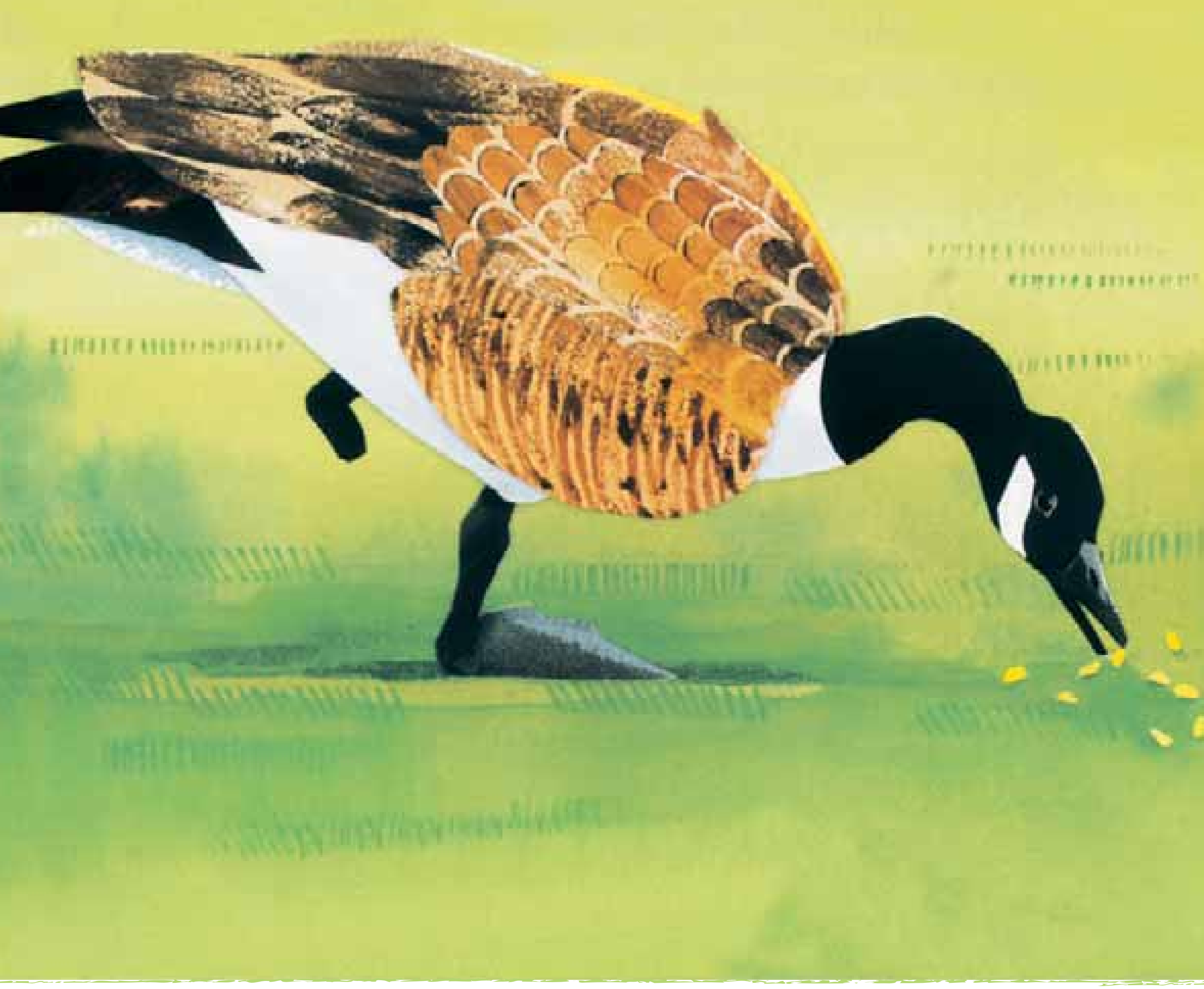
"Some kind of accident," says Mama, looking angry.

Cause and Effect
Why do the girl's feelings change about the goose?

For the rest of the spring, the other geese swim and the other geese nibble. They build their nests and show off their young. Soon they teach the babies to follow and the babies to swim. To stay away from raccoons and foxes—and from the goose with one foot. I never thought geese could be so mean.

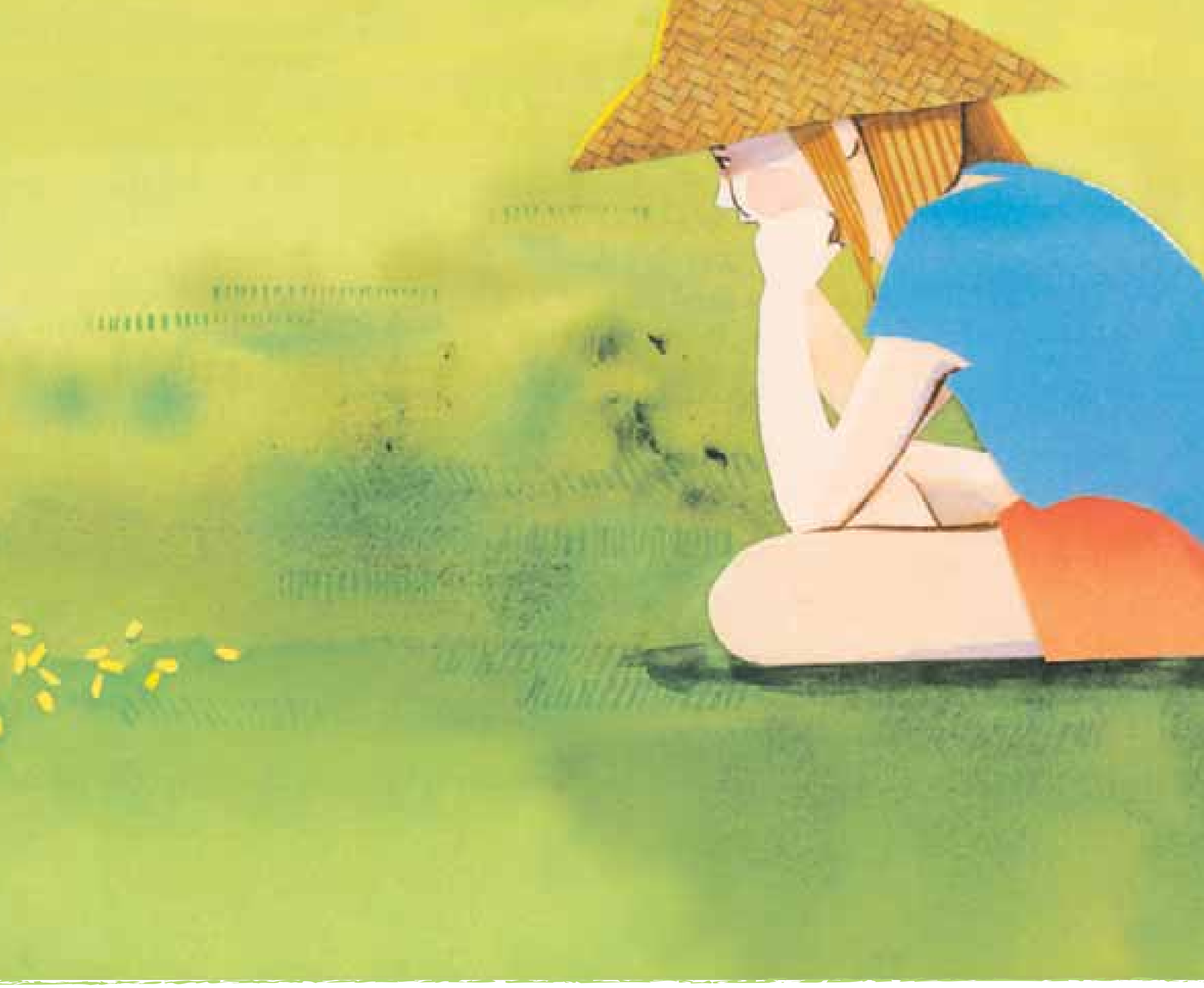
Every day when I look out, I see the goose in the same place. Bending over to get at the grass. Balancing her weight the way a ballerina would. Now even Henry knows she's different, and doesn't chase her.





I want to feed her. Pet her. Be her friend. But Mama says I mustn't. "A wild goose has to learn to live with her weakness. Or she won't live at all."

"Try to be strong, little girl," Papa tells me, "and let her be." But being strong is hard.

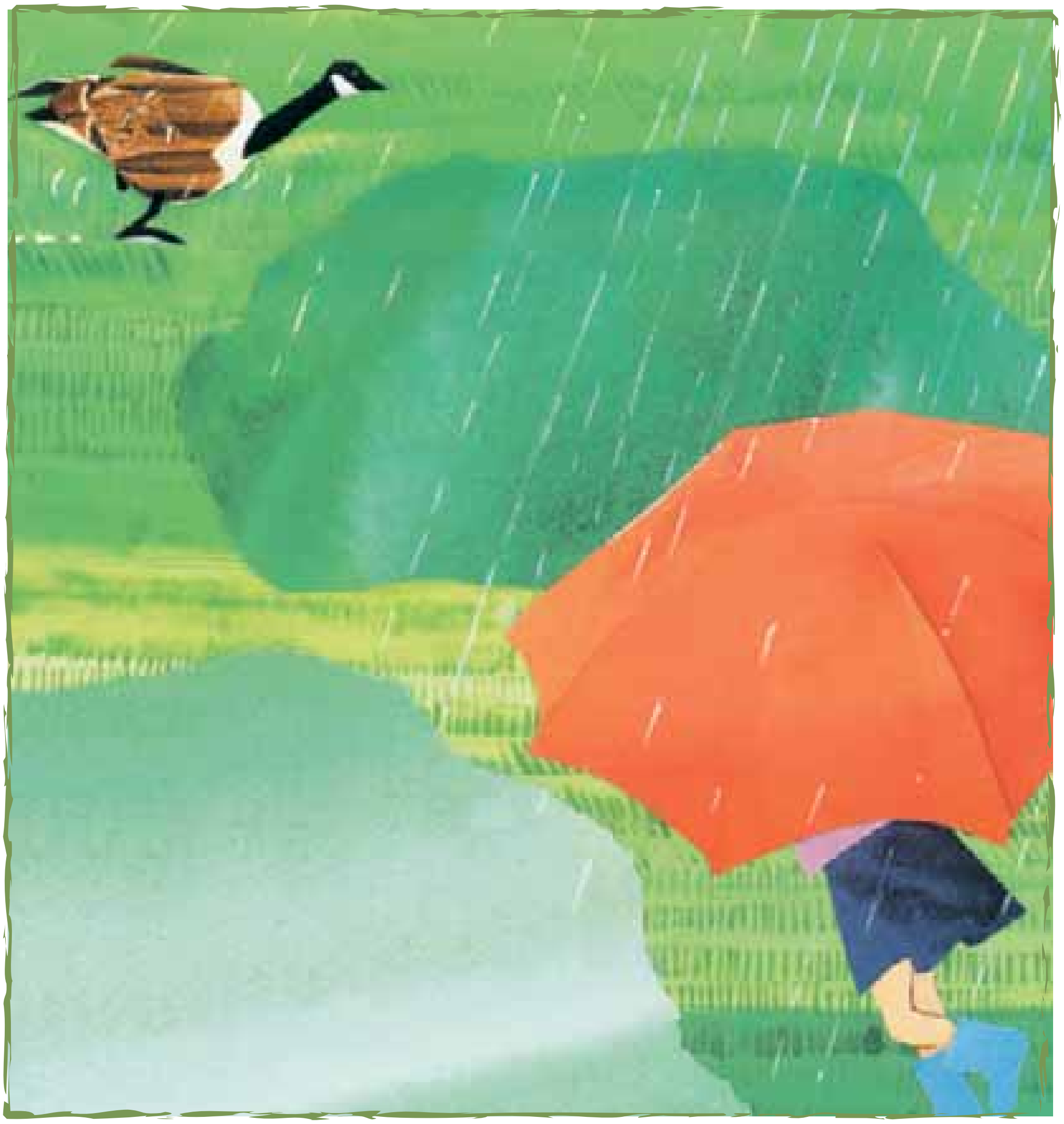


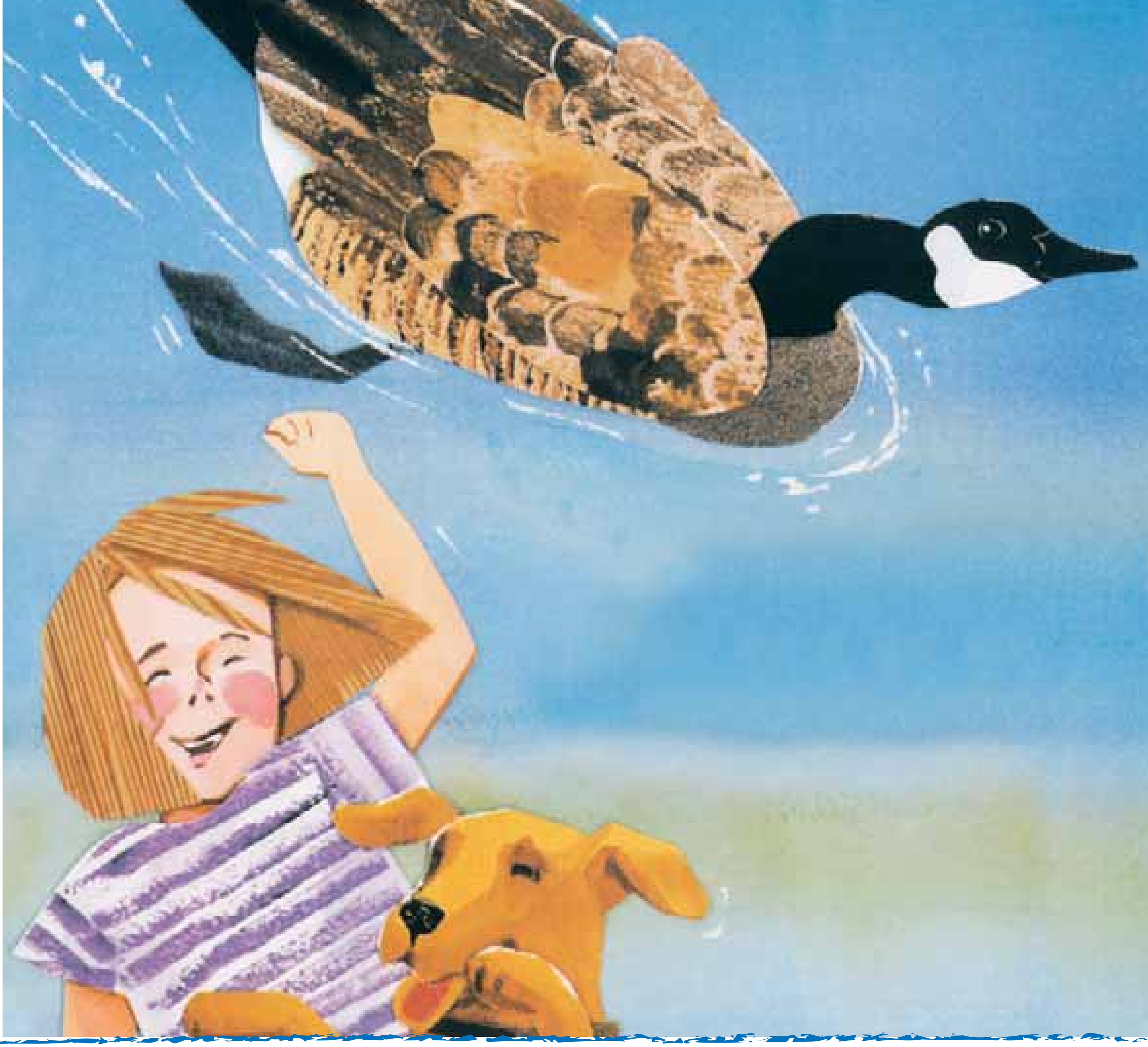
When Mama and Papa aren't looking, I sneak my goose some cracked corn. I talk to her like Mama talks to me when I'm sick. Soft and quiet. "I'm so sorry, goose. Does it hurt? Don't be afraid."

Then I tell her a story like Papa tells me before I go to bed. I blow her a kiss, and whisper, "Try to be strong, little goose."

One day when I look out, I don't see the goose with one foot. I run outside—and there she is—over where the grass is greener—hobbling on her stumpy leg. Like my grandma with her cane.

"Atta girl," I whisper, the way my teacher does when I try something hard at school.





The next day I tell her that I'm learning to swim. "But it's not as hard as learning to walk is for you," I say. And she listens.

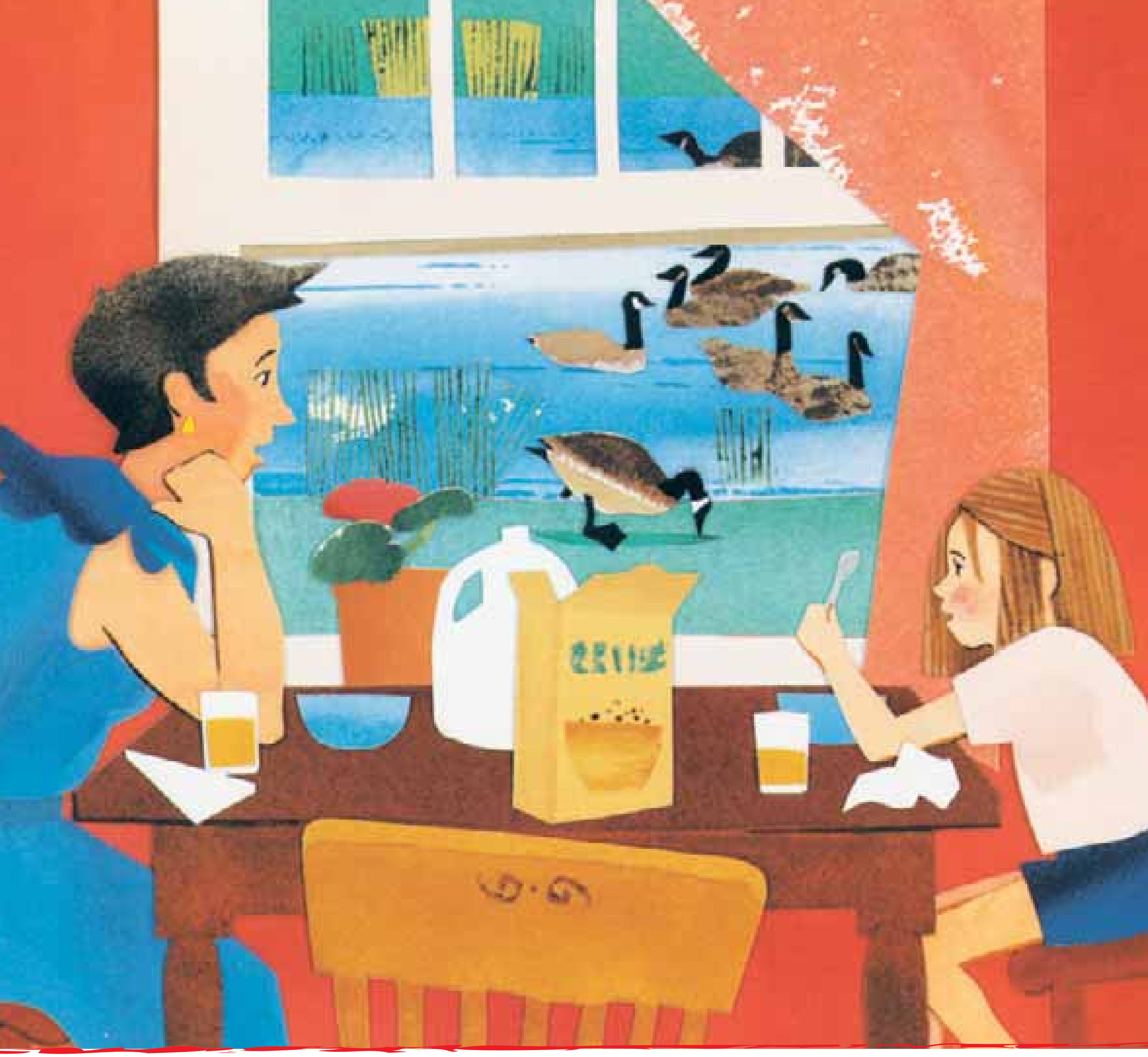
Another day, *she* tries to swim. Slowly at first. Then faster. Paddling across the **deserted** pond. Deserted except for me and Henry. Cheering.

"If only she would fly," I tell Mama. "Then the other geese wouldn't think she's weak. And she wouldn't always be by herself."

"It's not so easy," Mama says.

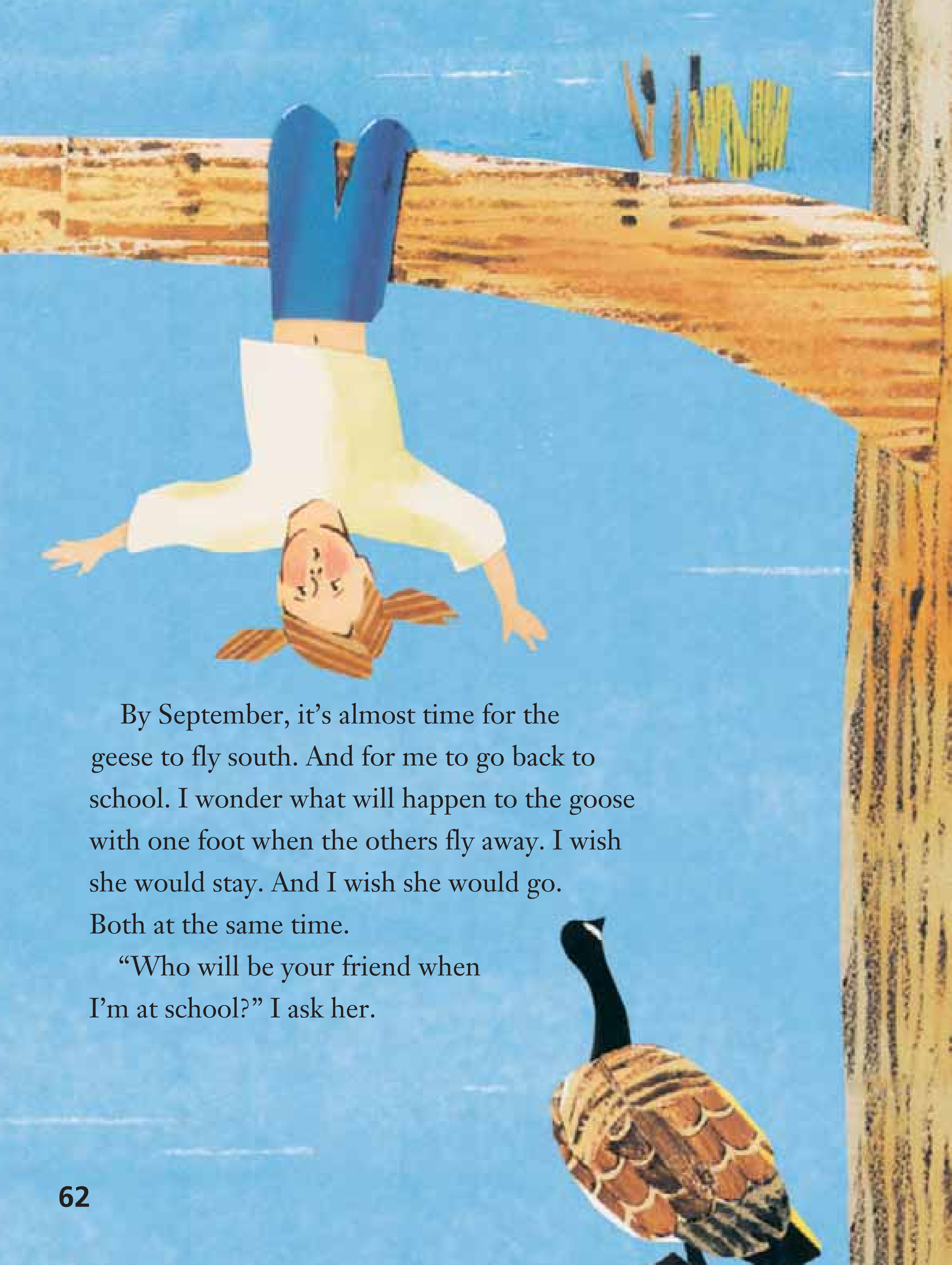
"She'd have to push off pretty hard with one foot," Papa tells me.

"Come on, goose," I whisper. "It will be getting cold soon. How will you keep safe when the pond **freezes** over?"



But she doesn't even try to fly. All summer long, my goose is happy to hobble and nibble and drink and swim.

One day I notice that the other geese have started swimming with her. Hooray! In the water, they look just the same. But I know they aren't.

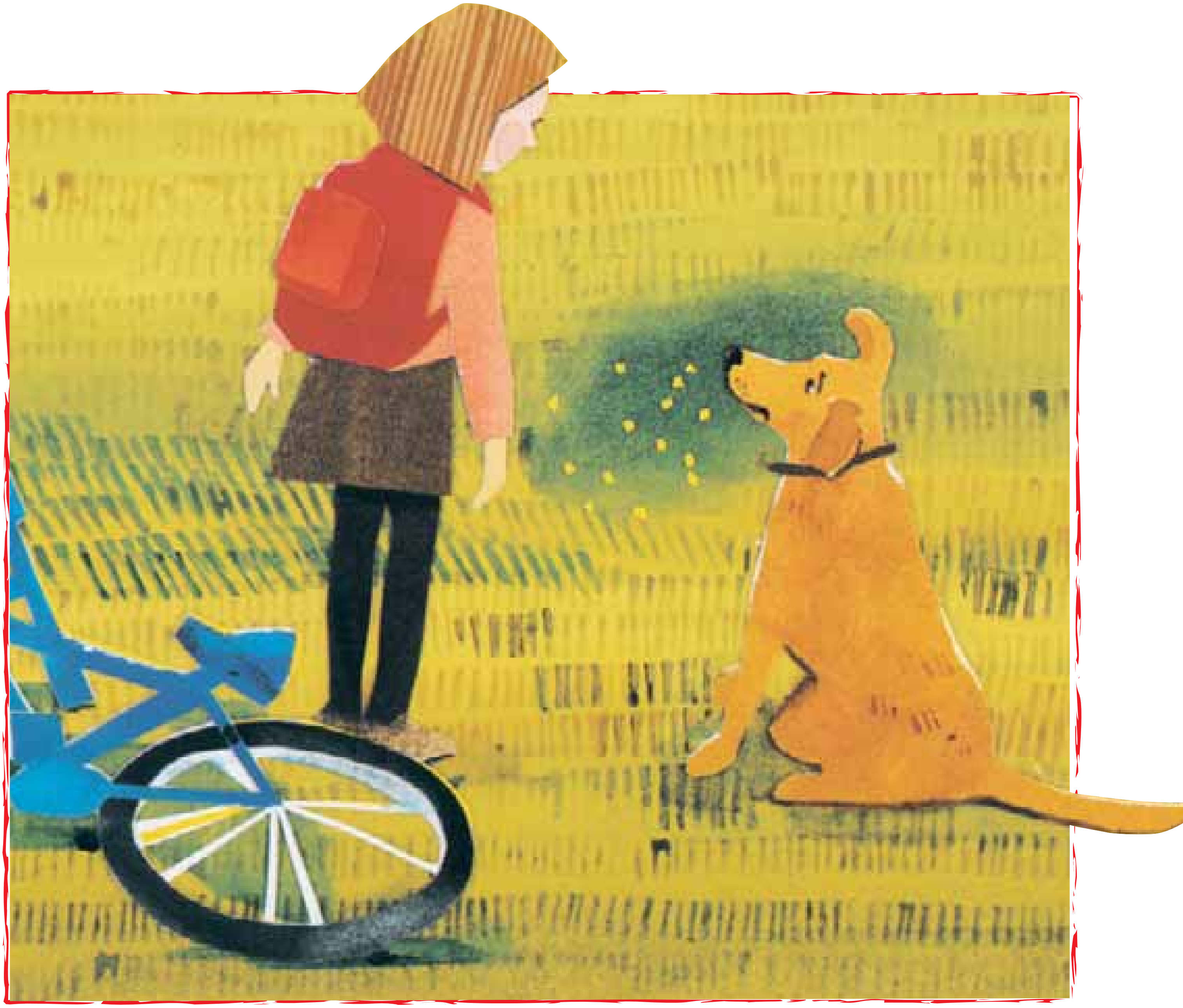


By September, it's almost time for the geese to fly south. And for me to go back to school. I wonder what will happen to the goose with one foot when the others fly away. I wish she would stay. And I wish she would go. Both at the same time.

"Who will be your friend when I'm at school?" I ask her.

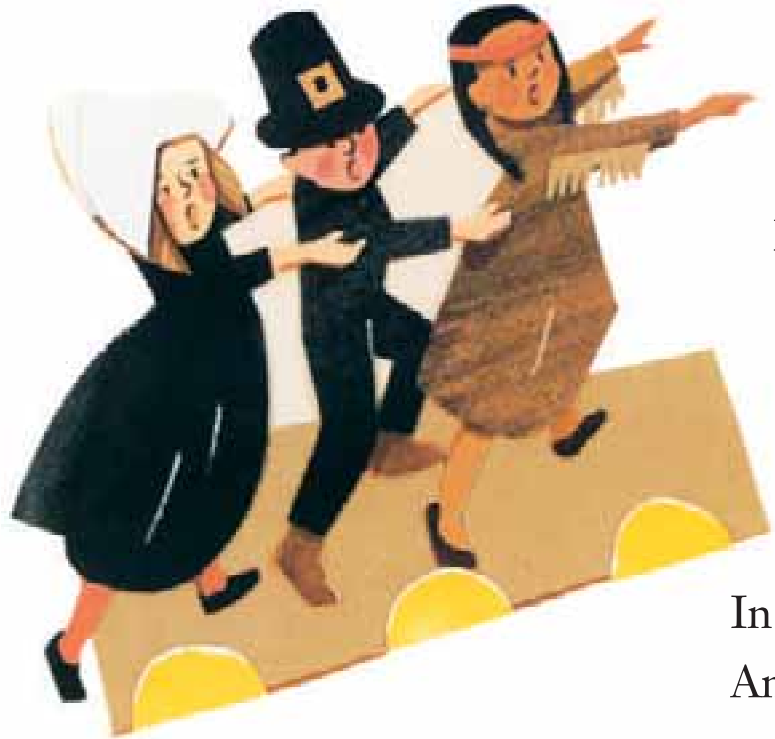
One afternoon when I get home, the geese have gone. I scatter some corn, but no one comes to get it. Henry looks at me, and I look at Henry.

We don't know what to think. Except that our goose is gone, too.



All fall and winter, I think about my goose. When I'm riding in the bus, I think I see her. Picking apples, I think I hear her.

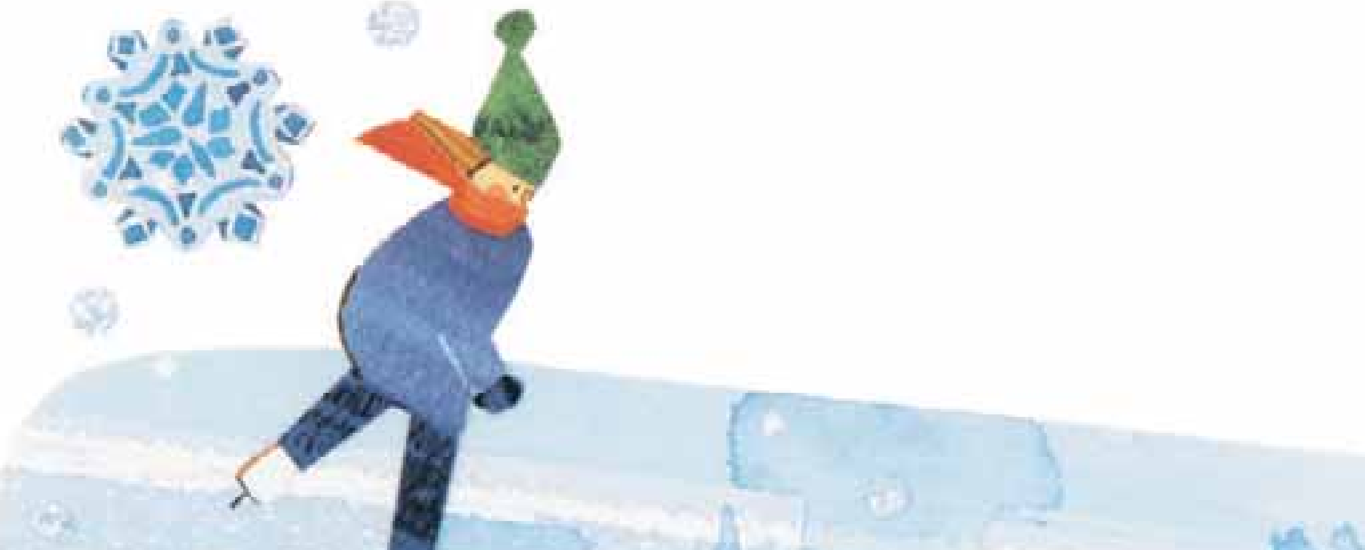
When I'm playing soccer, I **imagine** how hard it would be to run with one foot.



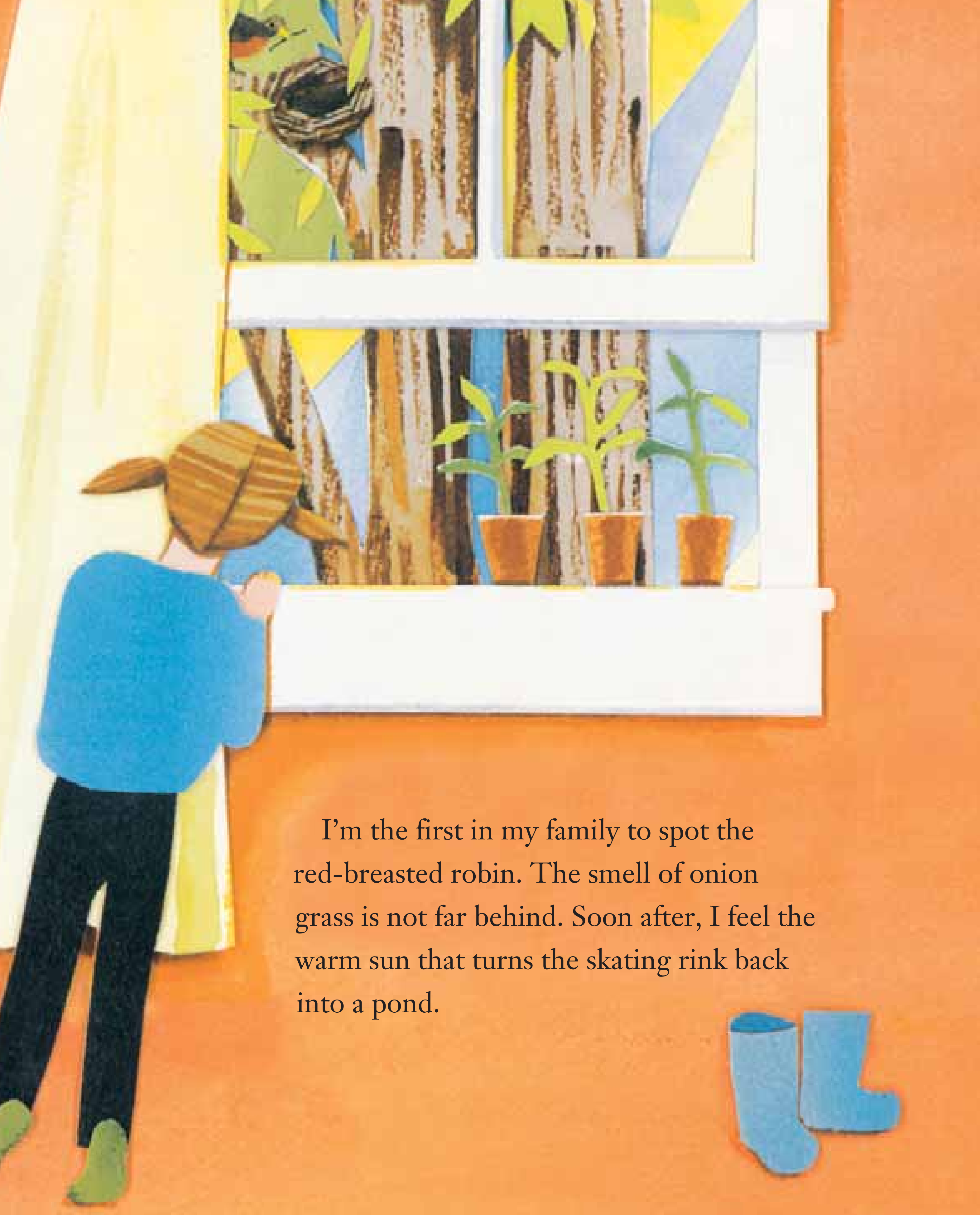
In November, I'm in a play at school.

In January, our pond is frozen solid.

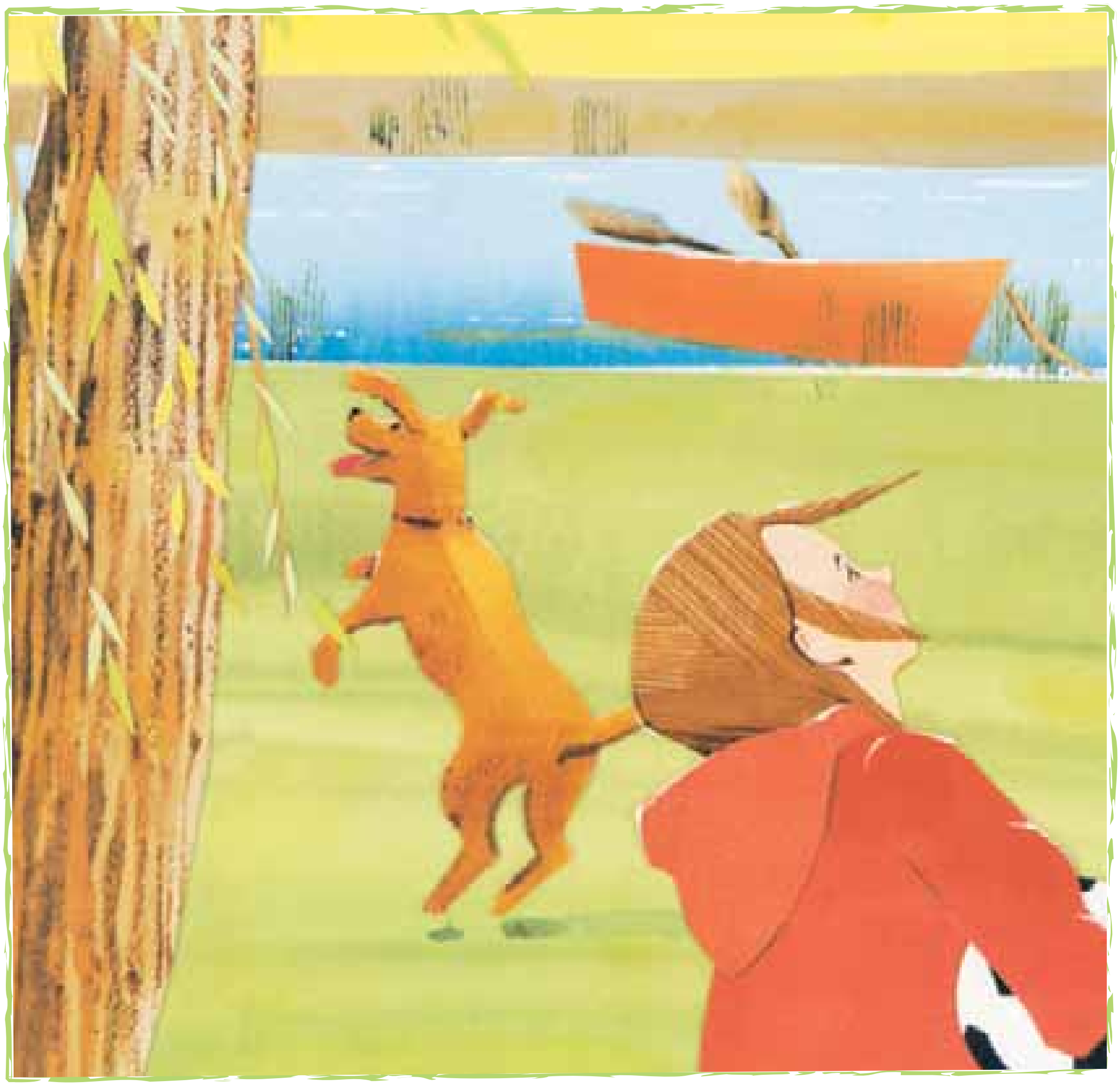
And in February, Mama starts her tomato plants indoors.



In March, Henry has begun to shed his winter coat. And Papa says I've grown two inches since summer.



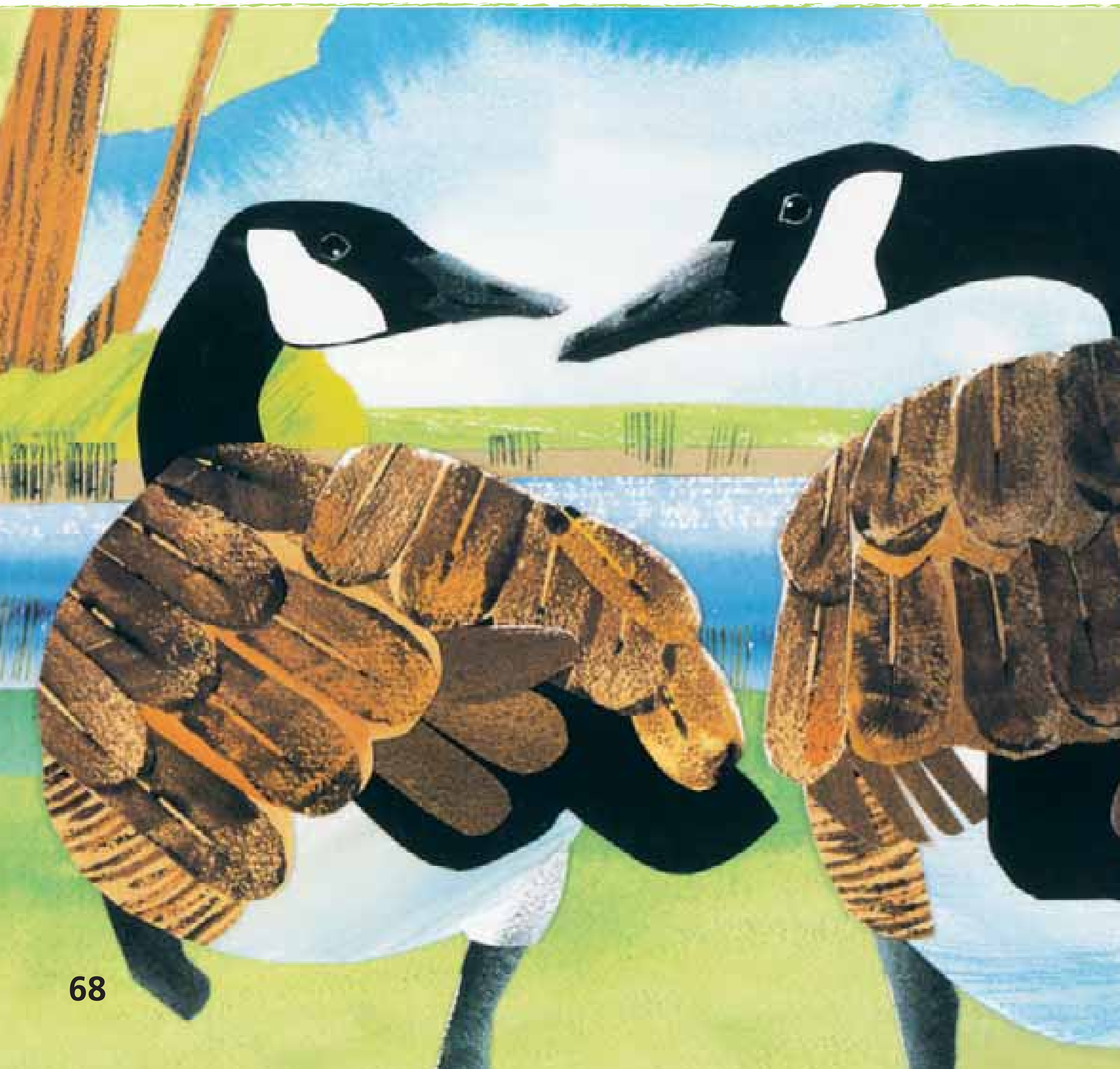
I'm the first in my family to spot the red-breasted robin. The smell of onion grass is not far behind. Soon after, I feel the warm sun that turns the skating rink back into a pond.



Henry hears the honking first. He circles the pond, around and a half, mud splattering what's left of his winter coat. Henry knows the geese are coming, and then I know it, too.

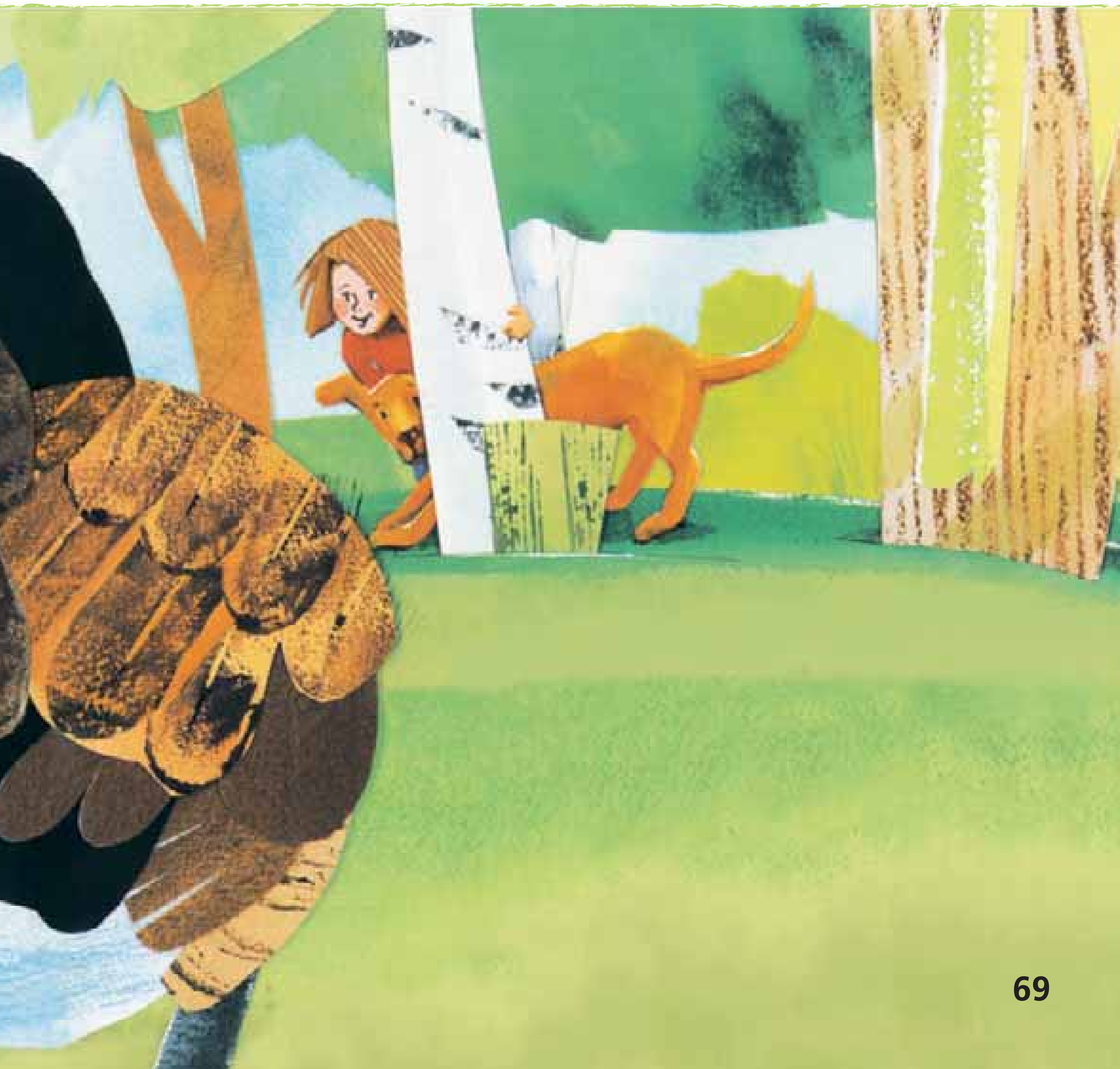
Cause and Effect
How do the girl and Henry know that the geese are coming?

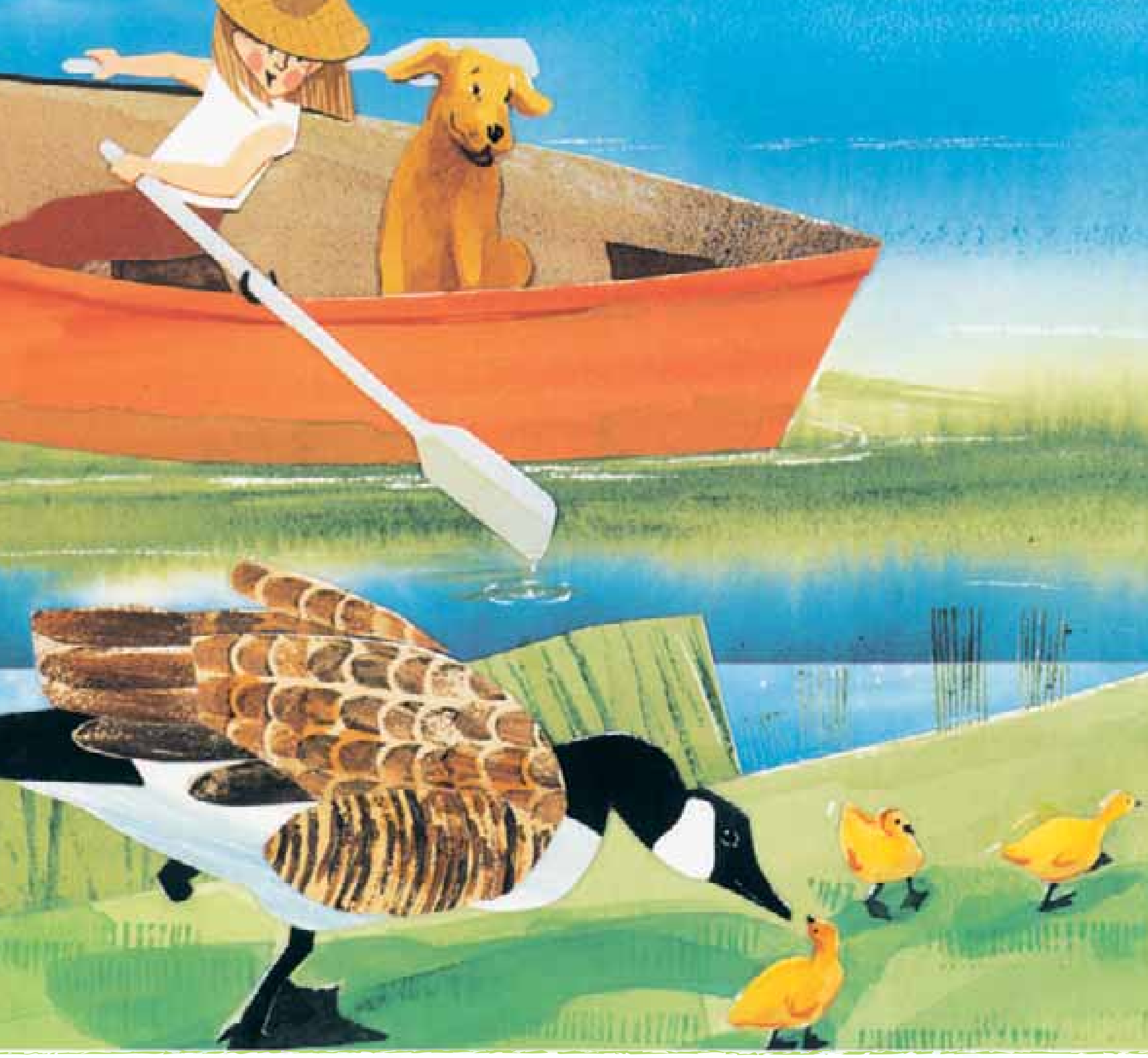
They land together. A couple of geese. Honking and flapping. Drinking and bathing. Combing each other's feathers. One is larger than the other, his neck as thick as a fire hose when he stretches it out to protect her—the goose with one foot.



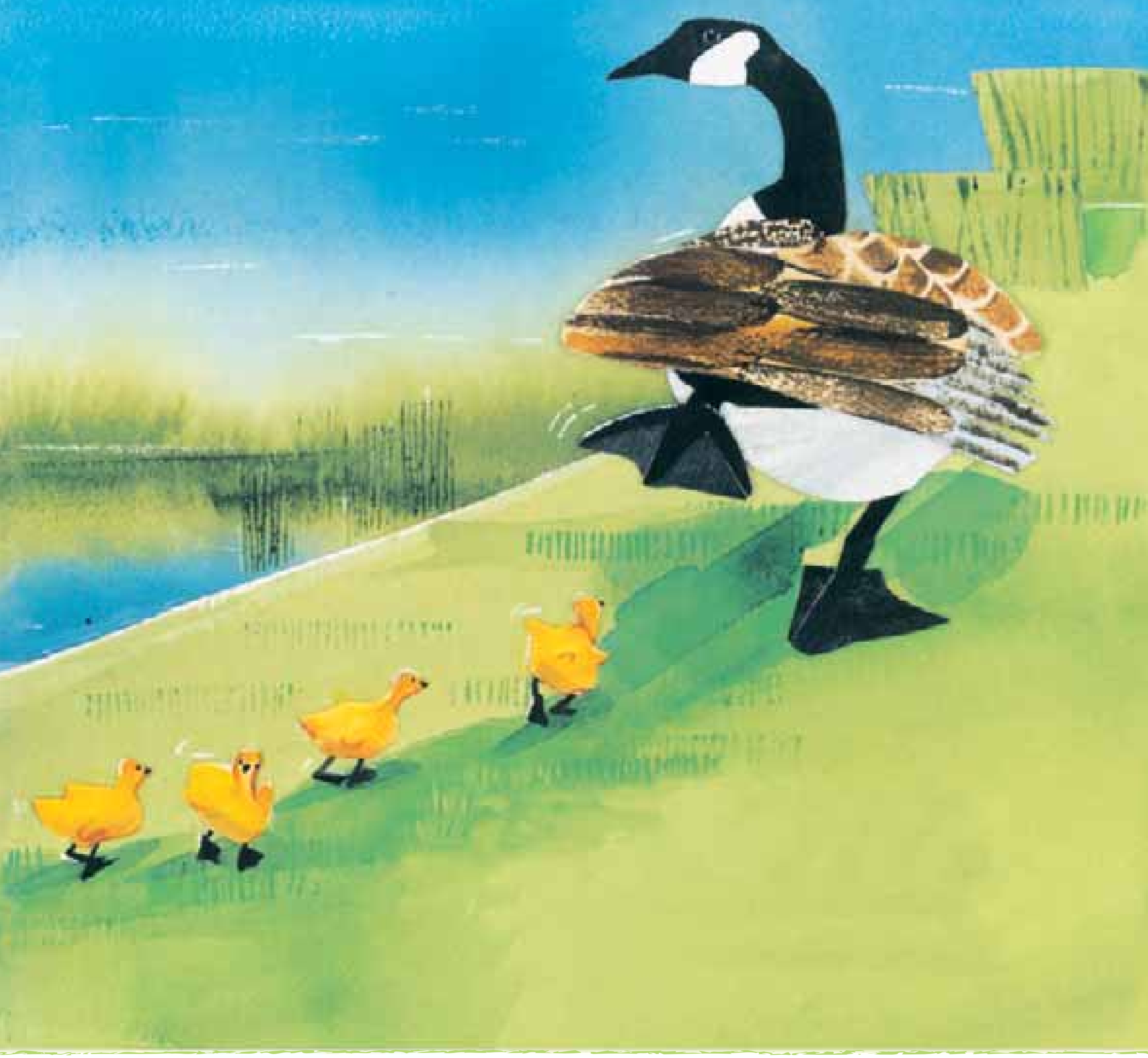
"It's really you, goose!" I shout. "It's really you!"

For the rest of the spring, two geese swim and two geese sun. Two geese peck and two geese nibble. Side by side, they're always together. Like Henry and me. Friends.





Then one morning in May, I find a big surprise. There is the goose with one foot and—seven babies! Seven babies with fourteen feet. Peeping and prancing and flapping and following. Right behind their papa.



I smile at the parade, and especially at my goose.
“Look at you,” I whisper. “Look at you.”

Meet the Author and Illustrator

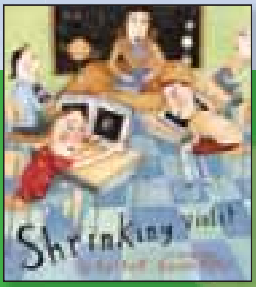
One day a few years ago, author **Cari Best** saw a one-footed goose in her yard. She didn't know how the goose lost its foot. She wondered whether it was from a snapping turtle, or perhaps an accident on the ice. But the goose with one foot did give Cari the idea for *Goose's Story*.

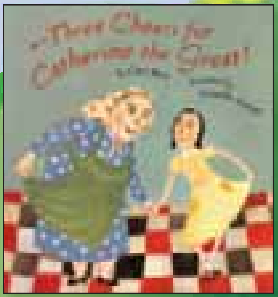
Collage artist **Holly Meade** says that making sketches is the hardest part of her job. "They involve answering a lot of important questions," she says. Holly has to think about what to put in the picture from the story, and what to add to the picture that's not in the story. She says it is important that her pictures "stay true to the spirit of the story."

Author's Purpose

Cari Best wrote a story about a special goose for readers to enjoy. What is your favorite animal? Write about it.

Other books
written by Cari Best



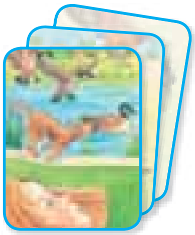


LOG ON Find out more about Cari Best and Holly Meade at **www.macmillanmh.com**

Comprehension Check

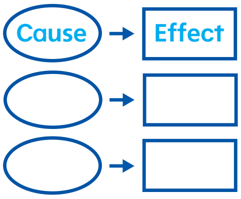
Retell the Story

Use the Retelling Cards to retell the story.



Retelling Cards

Think and Compare



1. How does the goose's injury change her life? **Ask Questions: Cause and Effect**
2. Reread page 53. Why does the girl **balance** on one foot? **Analyze**
3. Do you think the girl is right to feed corn to the goose? Why or why not? **Evaluate**
4. Why do you think the goose comes back to the pond the next spring? **Analyze**
5. How are the deserted geese in "Bill Helps Geese Survive" on pages 44–45 like the girl's goose? How are they different? **Reading/Writing Across Texts**

Science

Genre

Newspaper Articles give information and facts about current events.

Text Feature

Maps are drawings of places. They can help a reader understand where an article takes place.

Content Vocabulary

sanctuary
pollution
endangered

Baby Owl Rescue Is a "Hooting" Success!

by Bertie Benson

Sarasota, Florida — A baby owl fell out of its nest last week on Washington Boulevard. The bird got help from people at a bird **sanctuary**. A sanctuary is a place where animals are kept safe. Workers at the Pelican Man Bird Sanctuary treated the bird at their hospital. Then they returned the bird to its nest.

The baby owl fell 40 feet. Luckily, it was not hurt badly. Workers at the hospital fed the bird. They kept it warm and safe. The tiny owl looked like a fluffy white ball. Its eyes had not opened yet.

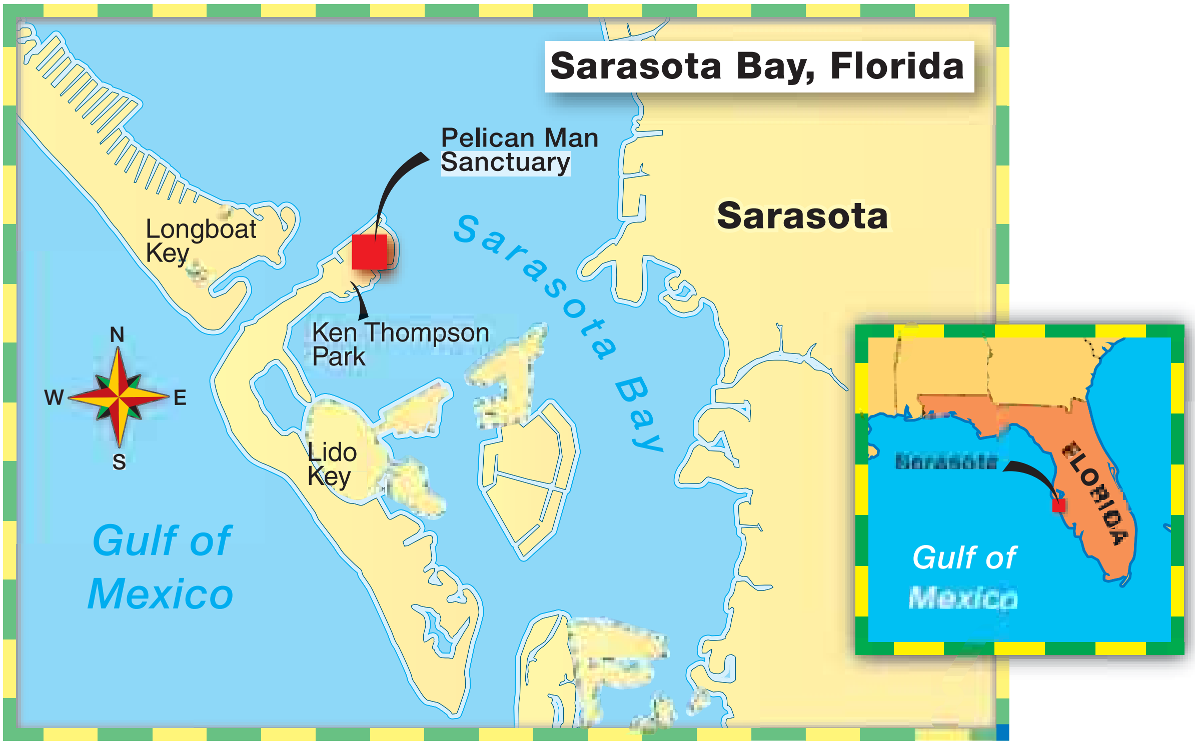
The workers asked a tree service to help them put the bird back in its nest. The tree service used a crane with a long neck. A man carefully put the baby owl back. The workers think the other baby might have accidentally pushed the baby bird out of its nest.

The team went back after two days to check on the baby owl. Its parents were feeding and taking care of it. The baby owl was safe.

The sanctuary was started by Dale Shields. Dale was called the "Pelican Man" because at first he only helped pelicans. Later he and his helpers started saving any animal in need. So far they have helped birds, deer, raccoons, bats, foxes, bobcats, turtles, and frogs.

Dale Shields

Wild animals get hurt in many ways. Water birds are injured when they get tangled in fishing lines. Animals are also hit by cars or boats. Water and land **pollution** hurts animals, too. Many of the animals the sanctuary helps are **endangered**. The workers want to help make sure the animals don't die out.


Sarasota Bay, Florida
Pelican Man Sanctuary
Sarasota
Longboat Key
Sarasota Bay
Ken Thompson Park
N
W
E
S
Lido Key
Gulf of Mexico
Sarasota
FLORIDA
Gulf of Mexico

These maps show where the sanctuary is located in Florida. The area in red on both maps indicates the sanctuary.

People call the sanctuary when they see a hurt bird or other wildlife. Sanctuary workers go to pick up the animal. Then they take the animal to the hospital. Their work helps many animals survive.

Half of the animals the sanctuary helps are returned to the wild. Other animals, like Moe, need special care. Moe is a swan who was attacked by a dog. It lost one of its wings, so it can't fly. Today, Moe and other animals like him live at the sanctuary.

Connect and Compare

1. Where in Florida is the sanctuary located? **Map**
2. Think about the newspaper article and *Goose's Story*. How are the stories alike? How are they different? **Reading/Writing Across Texts**

Science Activity

Research an endangered animal. Write about why the animal is endangered and what people are doing to help it.

LOG ON Find out more about animal rescue at **www.macmillanmh.com**

WRITE A NEWS STORY

Writer's Craft

Important Details
Good writers tell **important details** in their writing. This helps to make their message clear.

My news story tells details about who, what, where, when, and why.

I used the helping verb have.

Sea Turtles Spotted at Cedar Beach

by Ken L.

People gathered at Cedar Beach yesterday to watch sea turtles come ashore. Every summer the sea turtles come to the beach to lay their eggs. Scientists told the crowd not to bother the turtles or their nests.

"People have helped the turtles by staying far away," Dr. Ralph Santos said. "It is not easy to see the nests, and people can step on them by accident."

Who
people and Dr. Ralph Santos

What
gathered on the beach

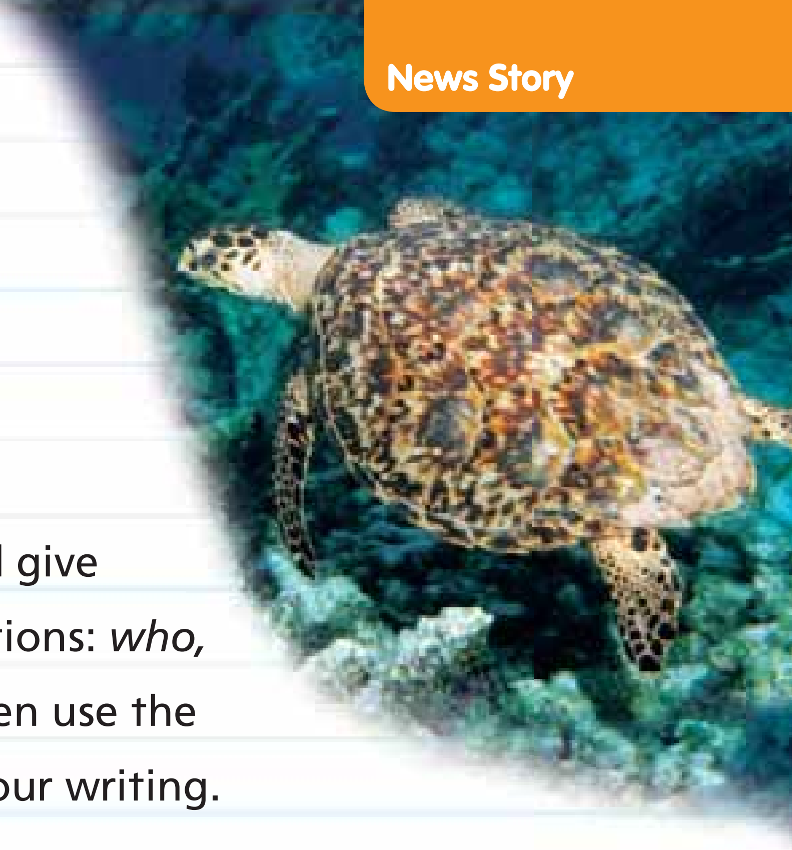
Where
Cedar Beach

When
yesterday

Why
sea turtles spotted

Your Turn

Write a news story about something that happened in your school or town. First, do research and take notes. Your story should give details that answer the questions: *who, what, where, when, why*. Then use the Writer's Checklist to check your writing.



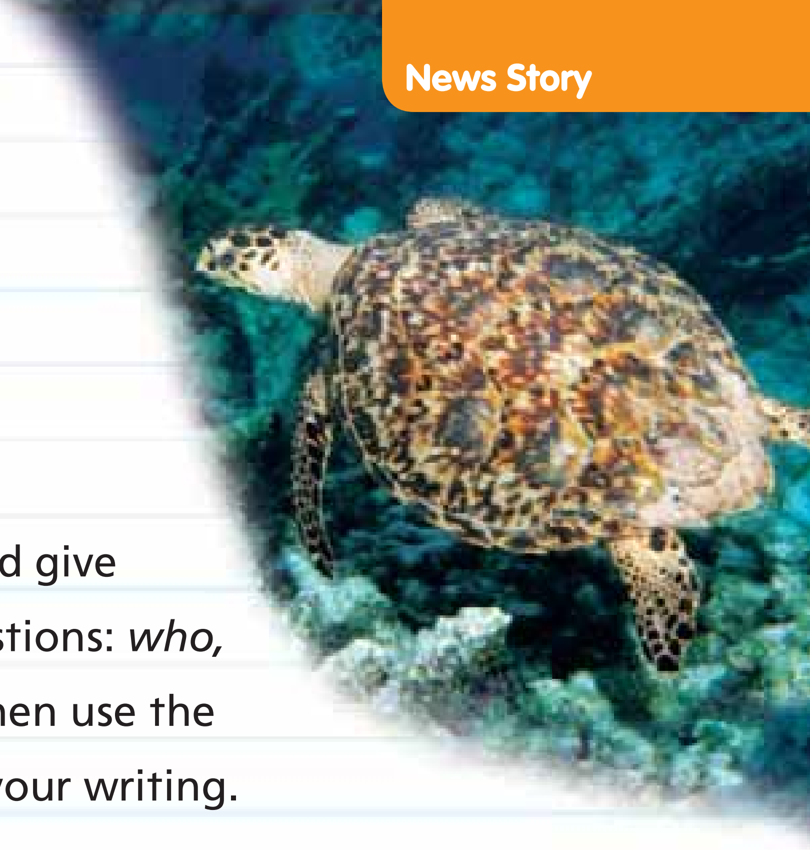
Writer's Checklist

☐ **Ideas:** Do I give important details that tell *who, what, where, when,* and *why* something happened?

☑ **Organization:** Did I tell the most important ideas first?

☑ **Conventions:** Did I use helping verbs correctly?

☑ **Sentence Fluency:** Did I vary my sentences to make them more interesting to read?



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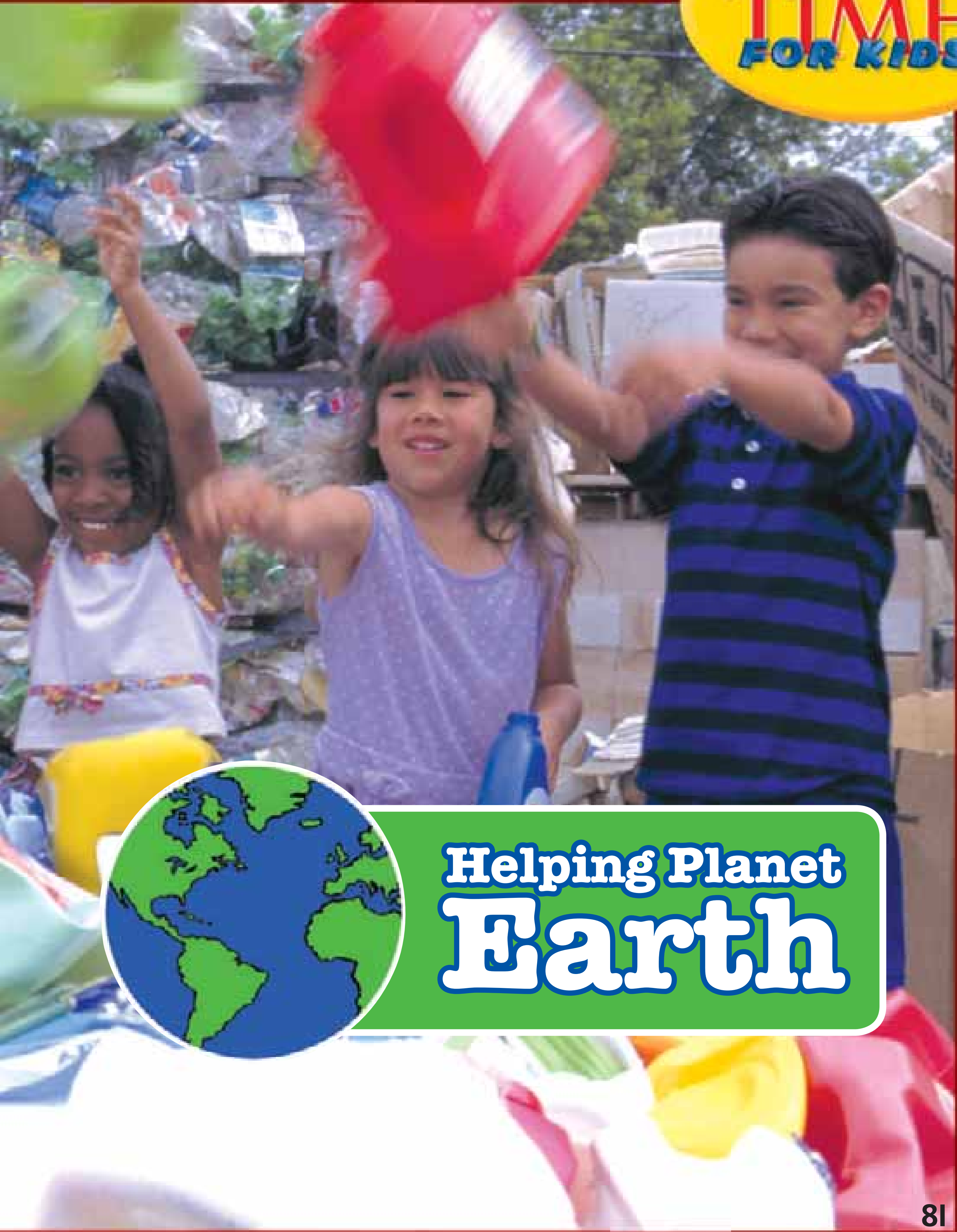
Talk About It

How do people cause problems for Earth? What can people do to help?

Find out more about ways to help Earth at **www.macmillanmh.com**

TIME FOR KIDS

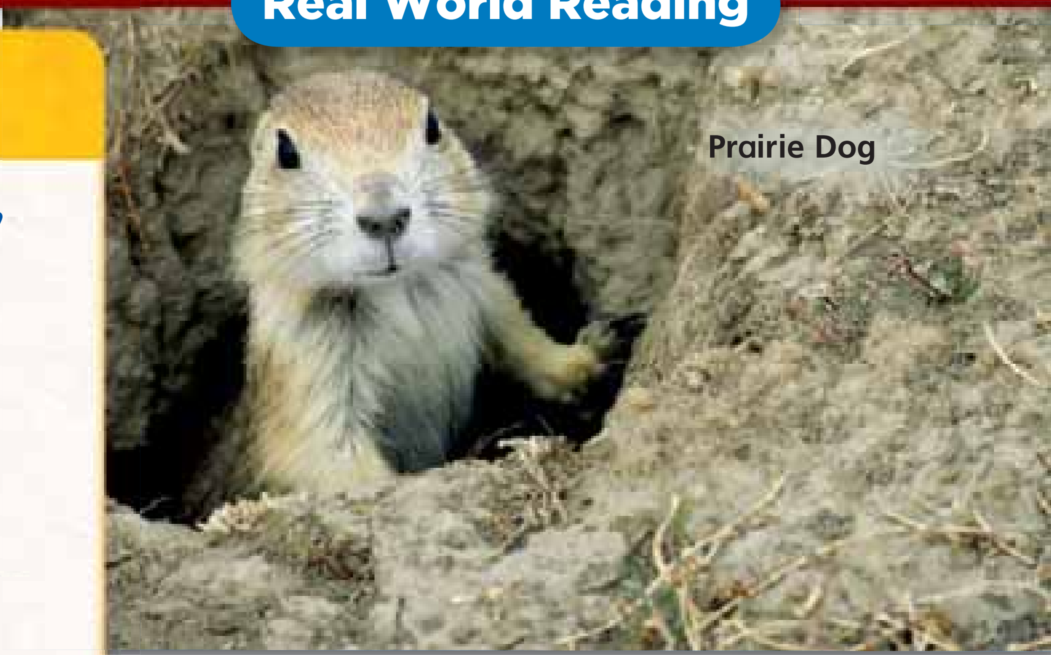


Helping Planet Earth

Real World Reading

Vocabulary

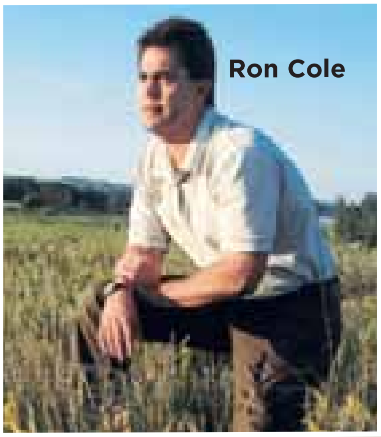
conservation
remains
trouble
extinct
hardest


Prairie Dog

Prairie Problem

"We really do not have a lot of time left to save the prairie," says Ron Cole. A prairie is a large, flat area covered with grasses.

Prairies have very few trees. Prairies once stretched across the middle part of the United States. Today, most of that land is covered with farms and towns instead of grasses. Ron Cole belongs to a **conservation** group that teaches people to take better care of the prairie. Their goal is to protect the prairie land that **remains**. That will help the plants and animals that live there.


Ron Cole

A South Dakota prairie

BE CAREFUL!

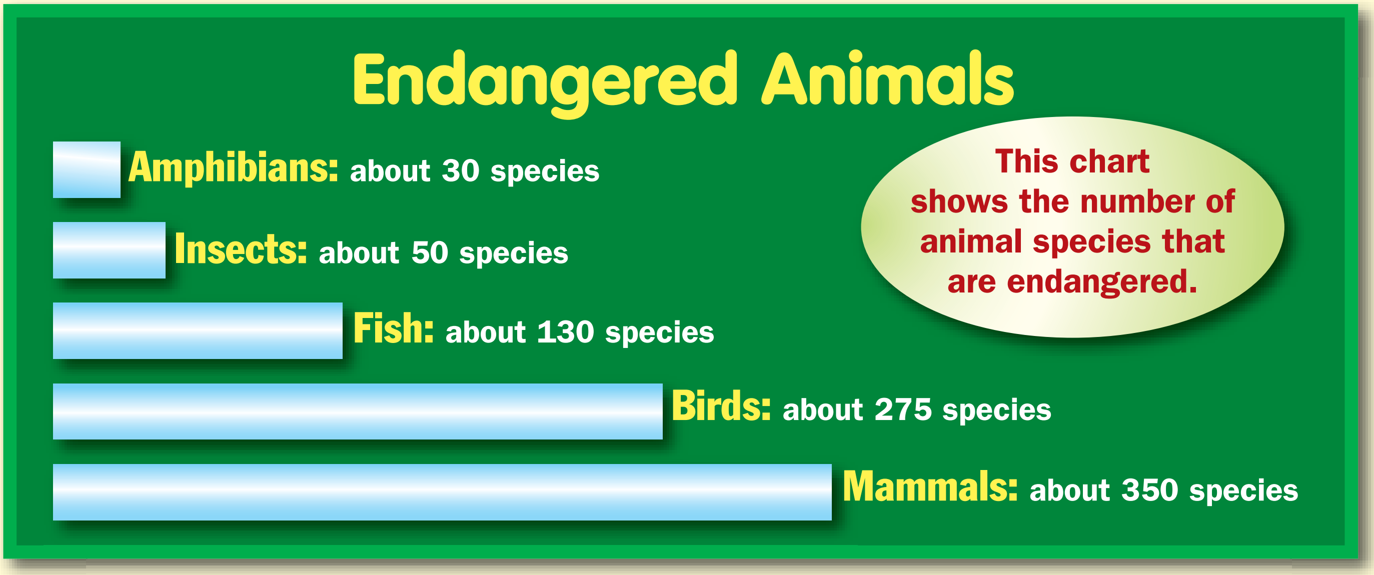
WE'RE ALMOST GONE!

Experts warn us that many animals on our planet are in **trouble**. More than one thousand animal species are endangered! That means that they may disappear forever and become **extinct**.

It is natural for some plants and animals to become extinct. But now humans are causing more living things to become extinct than ever before. As people cut down forests, mow down prairies, or move into deserts, plants and wild animals get pushed out.

Protecting endangered species is one of the **hardest** jobs people face. The good news is that people are working to solve this problem before it gets worse.

California Condor, an endangered species



LOG ON Find out more about endangered animals at **www.macmillanmh.com**

Real World Reading

A Way to Help Planet Earth

What can everyone do to help keep Earth clean?

Keeping Earth healthy is an important job. That's what environmental **conservation** is all about. People who do that job are working to keep the air, land, and water clean. They are also working to keep endangered plants and animals from becoming **extinct**.

One of the **hardest** jobs is solving the problem of trash. The **trouble** with trash is that it keeps piling up. We could run out of places to put it.

Comprehension

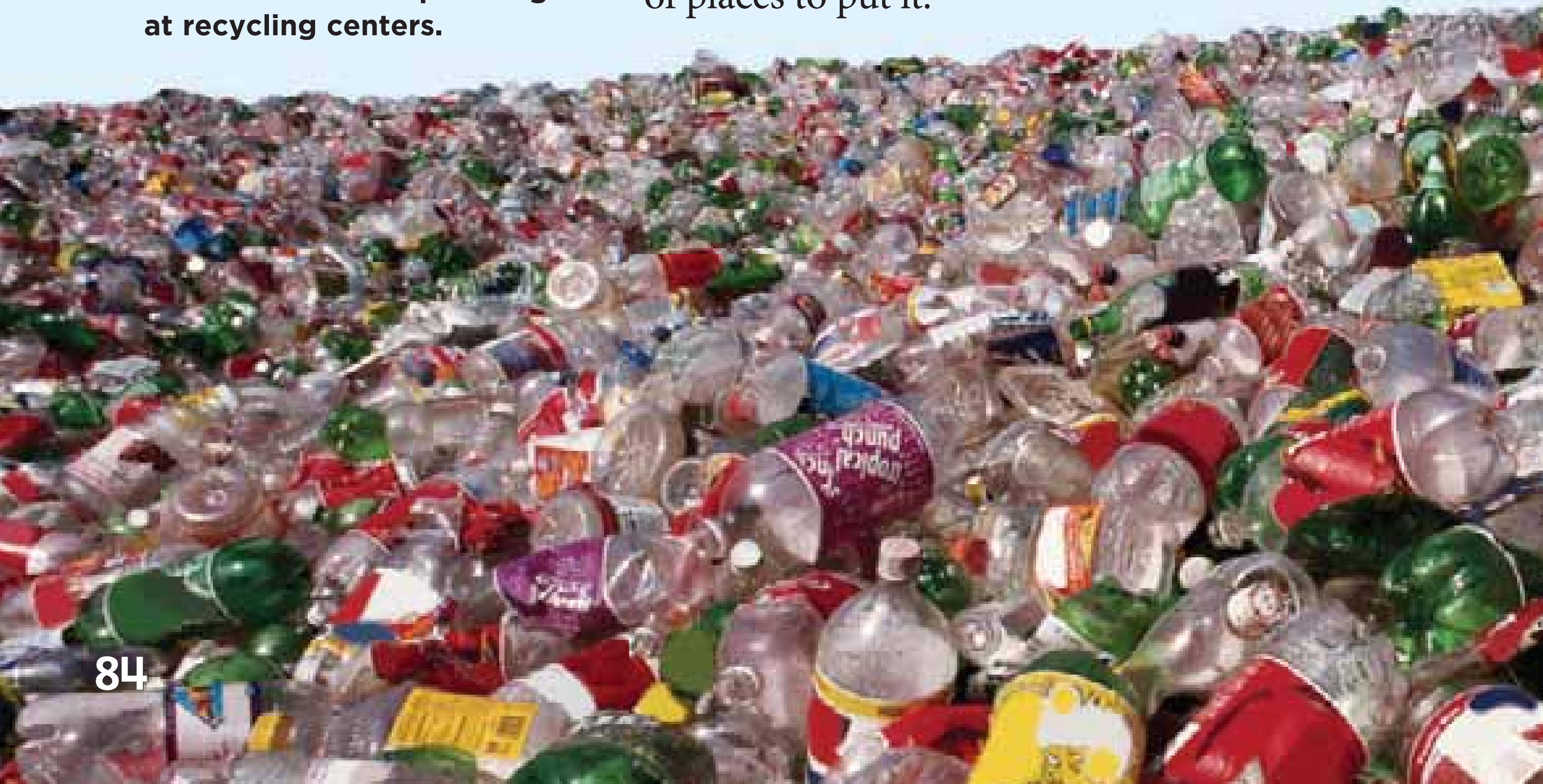
Genre

A **Nonfiction Article** gives information about real people, things, or events.

Ask Questions

Description

A description gives information about what something is like.



Plastic bottles are piled high at recycling centers.

A lot of our trash comes from plastic. Soda, juice, water, shampoo—these all come in plastic bottles. Too much plastic is one of our worst trash problems. When a plastic bottle becomes trash, it **remains** trash for hundreds of years. That's because plastic doesn't change much as it gets old.

Is there a better way to deal with plastic? Yes! We can recycle it.

When we recycle, we take something that's been used and turn it into something new. An old plastic bottle can stay old and become trash. Or that old plastic bottle can be recycled and become something new.

People recycle plastic and glass at home and at school.

Here's how it works. People save their plastic bottles. A special recycling truck picks the bottles up and takes them to the recycling center. Here, the bottles are crushed into small pieces. Then the small pieces of plastic are melted down. The melted plastic is sent to a factory.

At the factory, the old plastic is made into something new. It may become a new bottle or maybe a new rug. It may become a backpack or maybe even a slide at a playground!

1 Plastic bottles are separated from other trash.

2 Sanitation trucks collect the recyclables.

3 Plastics are taken to a recycling center.

4 Bottles are crushed into small pieces.

5 A factory turns recycled plastic into something new and useful.

A teacher and students visit a recycling center.

Sometimes there's not much kids can do to help solve our planet's problems. But kids can do a lot about trash. Recycling is one way all people, young and old, can make a big difference!

Think and Compare

1. Why is plastic trash a problem?
2. Describe what Earth would look like without recycling.
3. Besides recycling plastic, what does your community do to help keep Earth clean?
4. Prairies are smaller, some animals are endangered, and too much plastic is being thrown away. How have humans caused these problems?

Test Strategy

Right There
The answer is right there on the page. Skim for clues to find the answer.

WATER TROUBLES

Cormelia Gogu lives in Romania. Last year her school did not have clean water to drink. The water pipes were old and rusty. Workers from several countries replaced the pipes so Cormelia's school now has clean water.

Cormelia doesn't take water for granted. But many people do. In the United States, we can just turn on a faucet to get clean water. It isn't that easy in other countries.

Most of Earth is covered with water. But only a small amount is safe to drink. Some places receive little rainfall, so there isn't enough water to grow crops. In other places, the water is so dirty that it is not safe to drink.

Groups such as the United Nations are working to solve these problems. People need to save water so that everyone has water to drink.

These boys in Guatemala are enjoying clean water from a tap for the first time.

Go On

TIME FOR KIDS

Directions: Answer the questions.

Tip

Skim for clues.

1. Why is some water not safe to drink?

- A It comes from rain.
- B It is too old.
- C It is too dirty.
- D It does not taste good.

2. Why should you save water?

- A to keep water clean
- B to help birds and animals
- C so there is enough water to swim in
- D so everyone has enough water to drink

3. Why don't some places have enough water?

- A There are too few people.
- B They receive little rainfall.
- C There is too much rain.
- D There are too many crops.

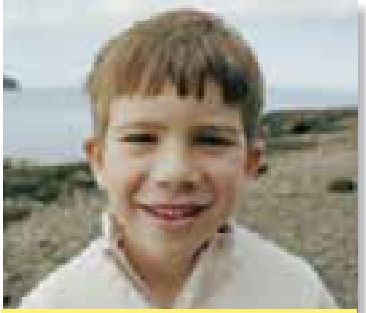
4. Describe what happened to the water at Cormelia Gogu's school.

5. What could you and your family do to help save water?

STOP

Write to a Prompt

In three or four paragraphs, persuade people that they need to take care of Earth.



I told my main idea at the beginning of the essay. Then I used details to support it.

We All Need the Earth

Earth has many resources. We have land, water, and air. We need to take care of these parts of Earth. We need to keep them clean.

Farmers use land to grow crops. If we put poison in the ground, crops will not grow. If we put buildings on all the land, there will be no farms. We need to save land.

We all need water. We drink it and use it to stay clean. But people waste water. If we run out of water, we cannot live.

We have to take care of the air, too. We need clean air to breathe. If we stop driving cars so much, the air will be cleaner.

We all need to save Earth's resources.

Your Writing Prompt

Write an essay telling people to take care of our environment. Suggest some things they can do to keep our land and water clean. Your essay should be three to four paragraphs long and include reasons to support your opinion.

Writer's Checklist

- ☑ Think about your purpose for writing.
- ☑ Form an opinion about the topic.
- ☑ Use reasons to support your opinion.
- ☑ Be sure your ideas are logical and organized.

Your Writing Prompt

Write an essay telling people to take care of our environment. Suggest some things they can do to keep our land and water clean. Your essay should be three to four paragraphs long and include reasons to support your opinion.

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- ☑ Use reasons to support your opinion.
- ☑ Be sure your ideas are logical and organized.

Wild Weather

Talk About It

What happens when a powerful storm strikes? How can people stay safe during a big storm?

LOG ON Find out more about wild weather at **www.macmillanmh.com**

Wild Weather Hits Florida

by Lisa O'Neil

Vocabulary

violent
beware
prevent
uprooted
destroy
grasslands

Word Parts

A compound word is a word that is made up of two smaller words.

grass + lands = *grasslands*

Hurricane Charley hit Florida in 2004. It was a **violent** storm that caused a lot of damage.

News reports told people in Florida to **beware** of the storm. People had to watch out for heavy rains and strong winds. Some people tried to make sure that their homes were safe. They covered their windows with wooden boards. The boards **prevent** windows from breaking.

Heavy rains dumped water everywhere and caused floods. Powerful winds **uprooted** trees.

The trees were blown over and the roots came out of the ground. Strong winds were even able to **destroy** houses. Some were completely flattened. Hurricane Charley also damaged crops. Luckily it did not hurt any of the cows in the **grasslands**. Farmers took the animals off the grassy fields in time.

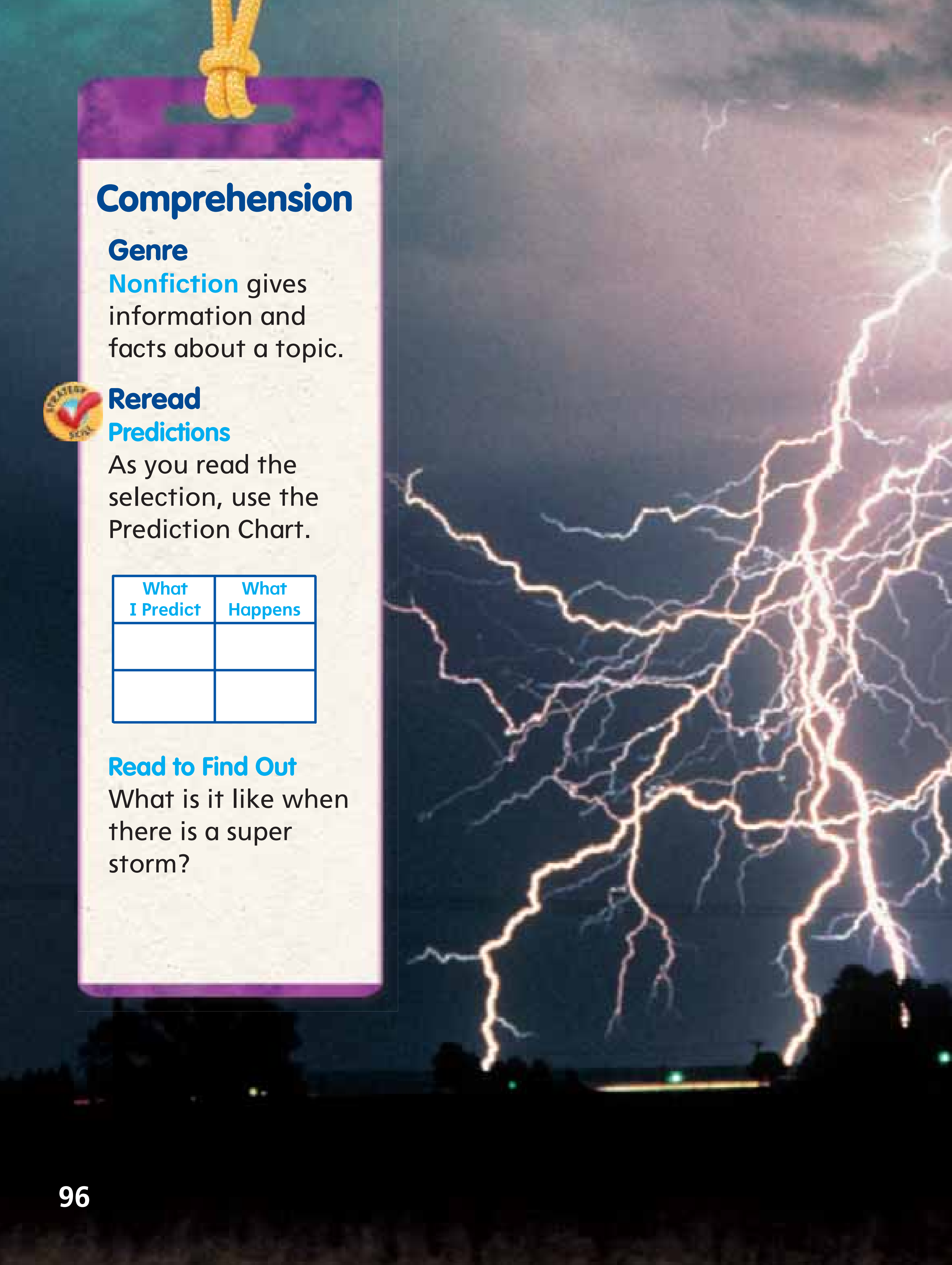
Reread for Comprehension

Reread

Make and Confirm Predictions

Rereading an article can help you confirm predictions, or check guesses you made, about what will happen later in the article. Reread the article and use the chart to make and confirm predictions about the weather.

What I Predict	What Happens



Comprehension

Genre

Nonfiction gives information and facts about a topic.

Reread

Predictions

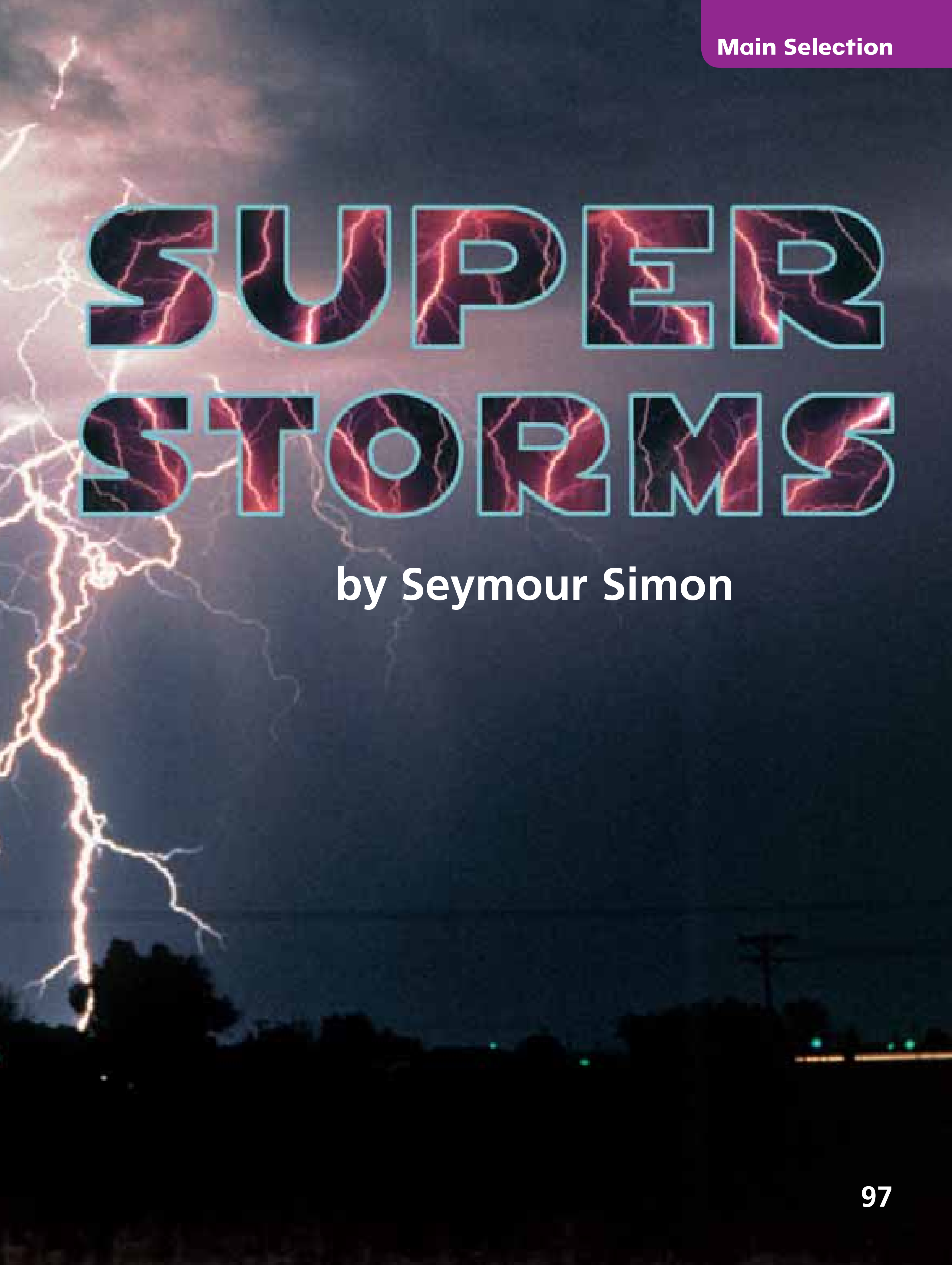
As you read the selection, use the Prediction Chart.

What I Predict	What Happens

Read to Find Out

What is it like when there is a super storm?

Main Selection



SUPER STORMS

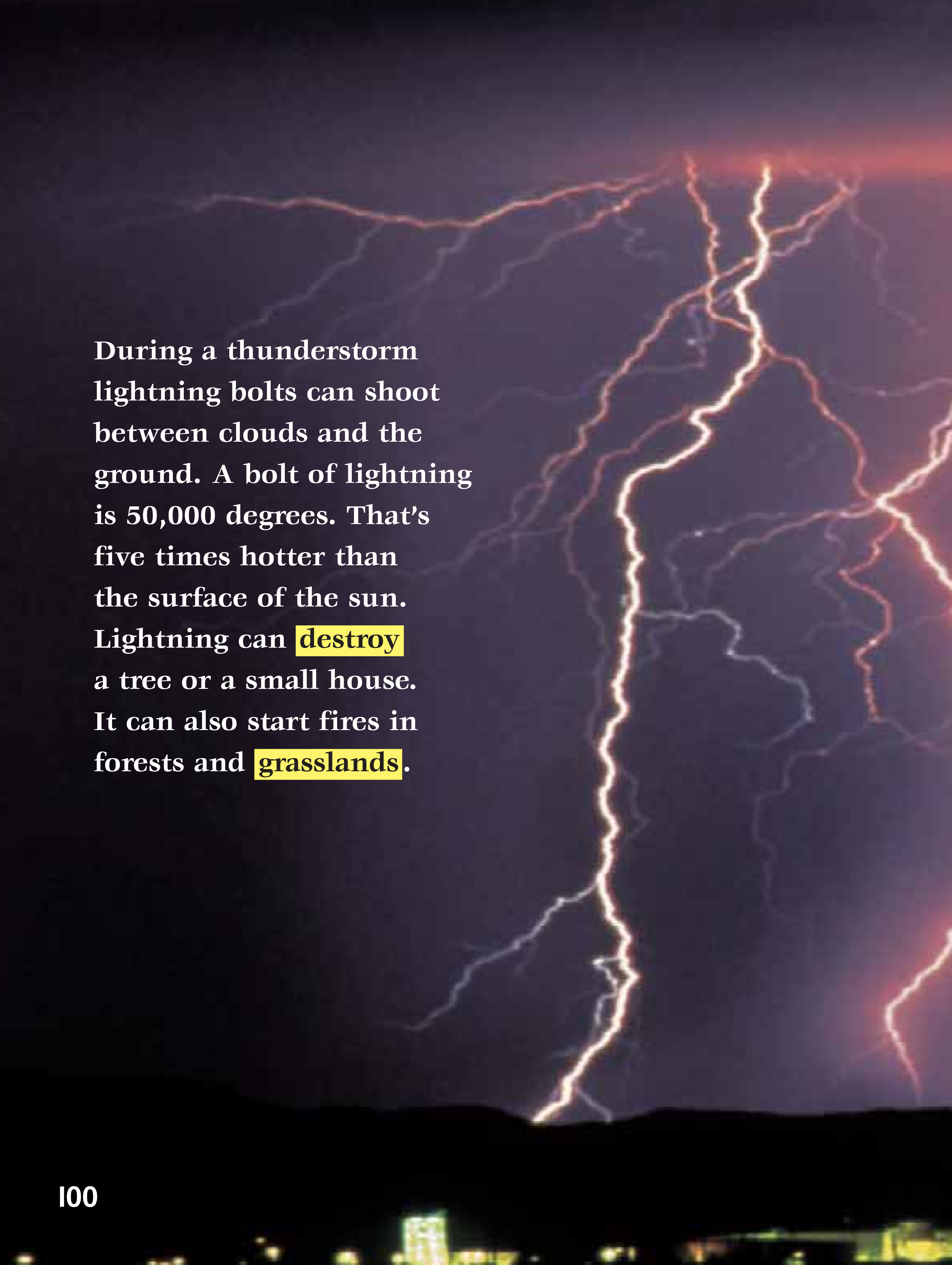
by Seymour Simon

The air around us is always moving and changing. We call these changes weather.

Storms are sudden, **violent** changes in the weather.

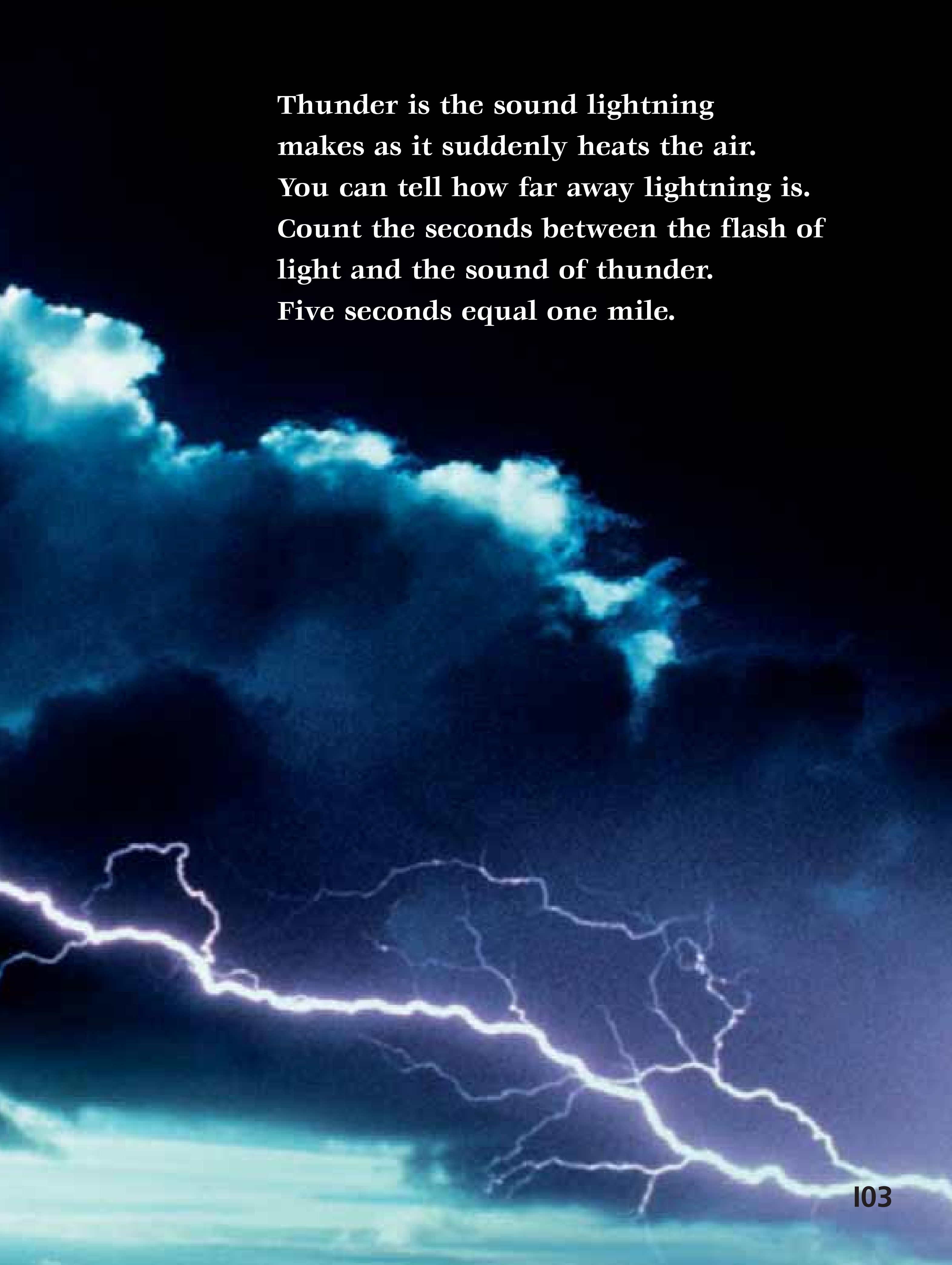
Every second, hundreds of thunderstorms are born around the world. Thunderstorms are heavy rain showers. They can drop millions of gallons of water in just one minute.

Make and Confirm Predictions
How might a thunderstorm cause damage?



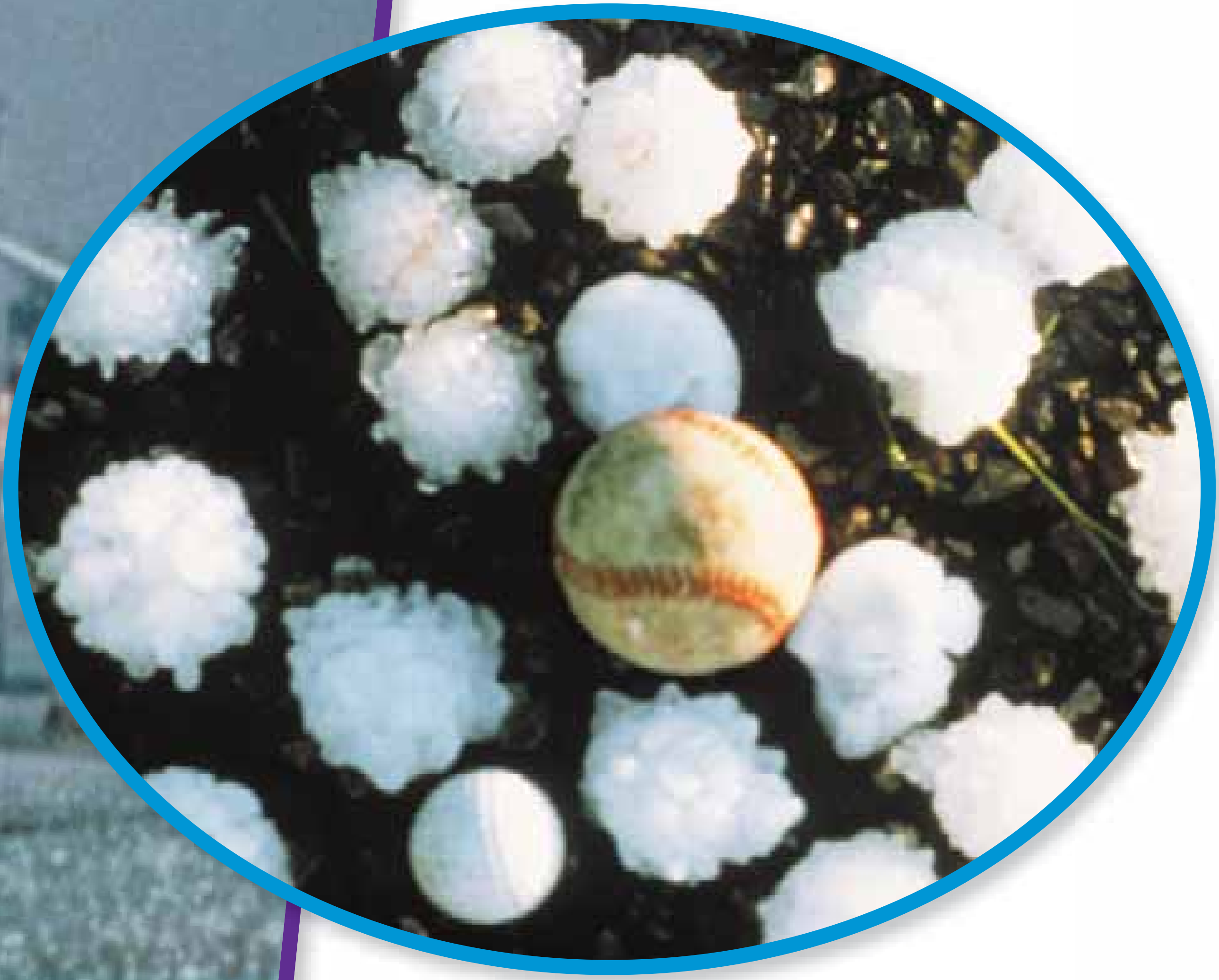
During a thunderstorm lightning bolts can shoot between clouds and the ground. A bolt of lightning is 50,000 degrees. That's five times hotter than the surface of the sun. Lightning can destroy a tree or a small house. It can also start fires in forests and grasslands.

Thunder is the sound lightning
makes as it suddenly heats the air.
You can tell how far away lightning is.
Count the seconds between the flash of
light and the sound of thunder.
Five seconds equal one mile.



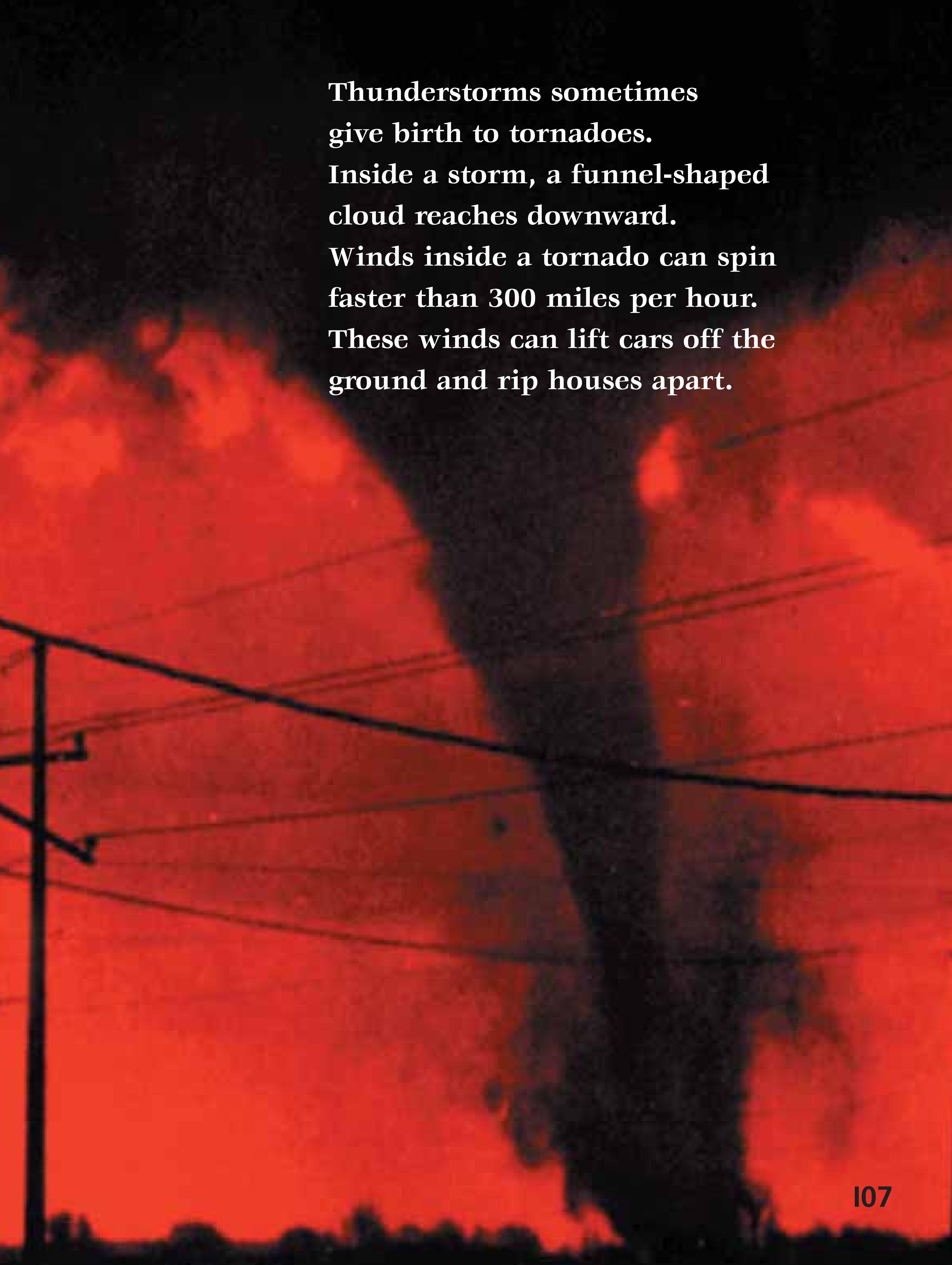
Hailstones are chunks of ice that are tossed up and down by the winds of some thunderstorms.

Nearly 5,000 hailstorms strike the United States every year. They can destroy crops and damage buildings and cars.



Hail can be the size of a marble or larger than a baseball.

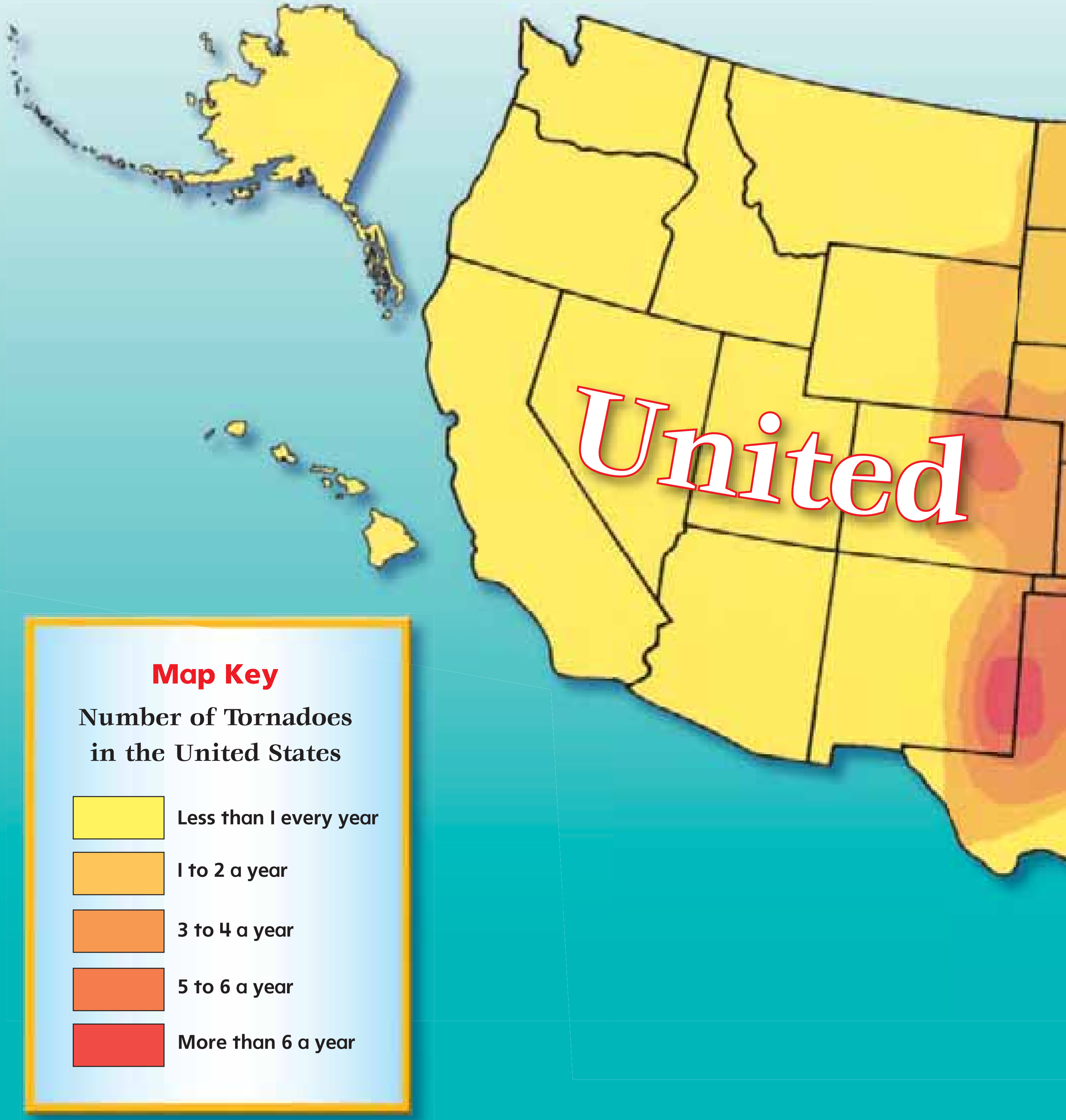
In July 1995, a fast-moving group of thunderstorms hit New York State. Winds reached speeds of 100 miles per hour. Over 3,000 lightning bolts struck in one minute. And millions of trees were **uprooted** or snapped in two.



Thunderstorms sometimes
give birth to tornadoes.
Inside a storm, a funnel-shaped
cloud reaches downward.
Winds inside a tornado can spin
faster than 300 miles per hour.
These winds can lift cars off the
ground and rip houses apart.

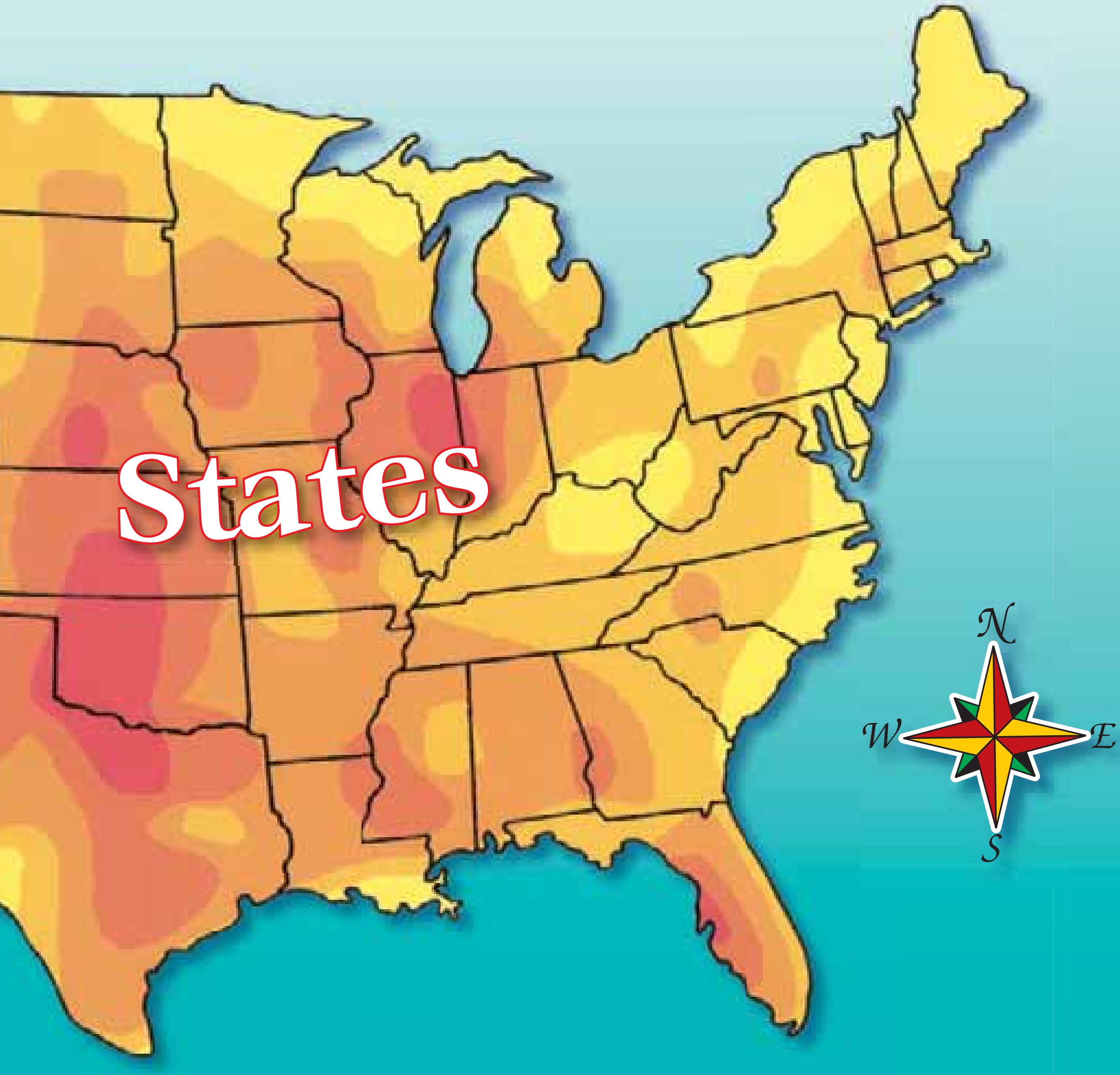
More than 1,000 tornadoes strike the United States each year. Most of them form during spring and summer. In April 1974, nearly 150 tornadoes struck 13 states east of the Mississippi River. More than 300 people were killed and 5,000 were injured. Nearly 10,000 homes were destroyed.

Television and radio stations often give early alerts. A tornado watch means that one may strike during the next few hours.


United
Map Key
Number of Tornadoes in the United States
🟨 Less than 1 every year
🟧 1 to 2 a year
🟧 3 to 4 a year
🟧 5 to 6 a year
🟥 More than 6 a year

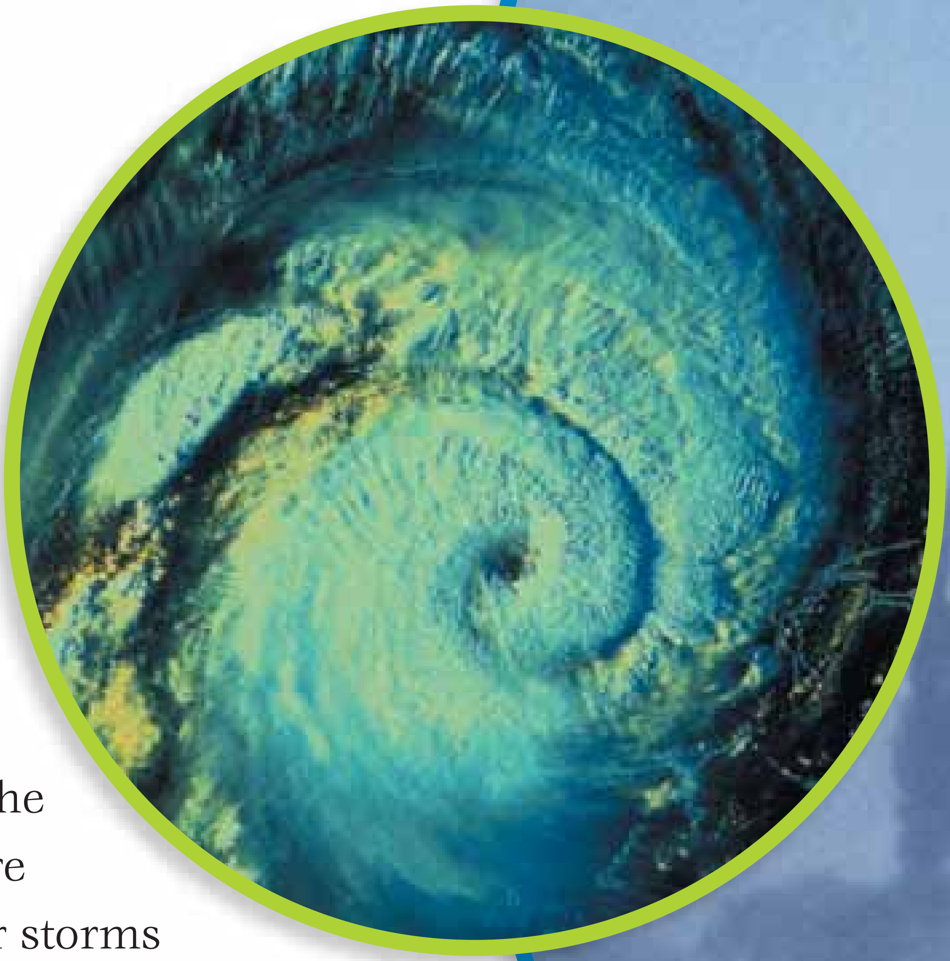
A warning means a tornado has been seen by people or on radar. During a tornado warning you should find shelter in a basement or closet.

States



The map shows the number of tornadoes that hit the United States every year.

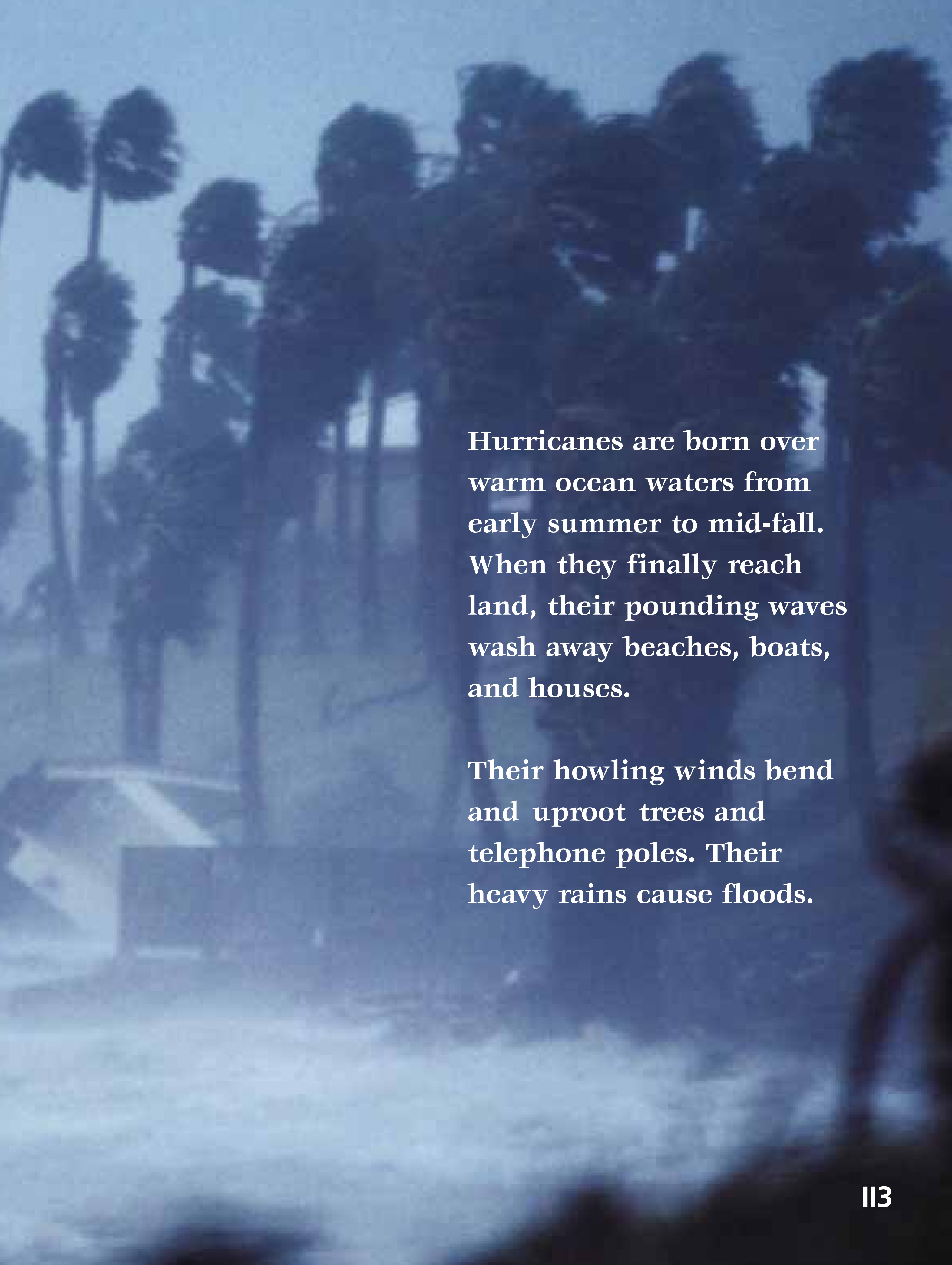
This photograph of a hurricane was taken in space looking at Earth.



Hurricanes are the deadliest storms in the world. They kill more people than all other storms combined. Hurricanes stretch for hundreds of miles. They have winds of between 74 and 200 miles per hour. The eye of a hurricane is the quiet center of the storm. Inside the eye, the wind stops blowing, the sun shines, and the sky is blue. But **beware**, the storm is not over yet.

Make and Confirm Predictions

Why do you think the eye of a hurricane is dangerous?



Hurricanes are born over warm ocean waters from early summer to mid-fall. When they finally reach land, their pounding waves wash away beaches, boats, and houses.

Their howling winds bend and uproot trees and telephone poles. Their heavy rains cause floods.

In August 1992, Hurricane Andrew smashed into Florida and Louisiana. Over 200,000 people were left homeless.

In the Pacific Ocean, hurricanes are called typhoons. In April 1991, a typhoon hit the country of Bangladesh. Over a million homes were damaged or destroyed. More than 130,000 people died.

Blizzards are huge snowstorms. They have winds of at least 35 miles per hour. Usually at least two inches of snow falls per hour. Temperatures are at 20 degrees or lower. Falling and blowing snow make it hard to see in a blizzard.

In March 1993, a major blizzard struck the entire East Coast. Cold temperatures, high winds, and heavy snows hit from Florida to Canada.

Millions of people lost power and spent days in dark, cold homes. Thousands were stuck on snowy highways and in airports when planes were grounded.

No one can prevent storms. But weather reports can predict and warn us when a storm may hit. The more prepared we are, the safer we will be when the next one strikes.

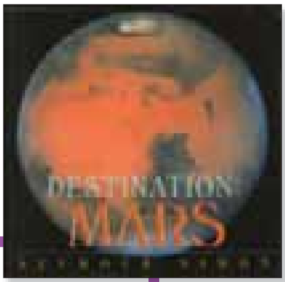
Science Facts about Seymour Simon

Seymour Simon has been writing about science for children for more than 40 years. He has written more than 200 books and is working on many more. He says that he'll never stop writing.

Seymour gets his ideas from many places. He says he was always interested in science. For example, Seymour wrote a book called *Pets in a Jar* because he collected little animals in jars as a boy. Other ideas come from his years as a science teacher. Now his grandchildren give him ideas. One grandson asked for a book about trains. *Seymour Simon's Book of Trains* was published soon after.

Other books written by Seymour Simon

LOG ON Find out more about Seymour Simon at **www.macmillanmh.com**



Author's Purpose

Seymour Simon wanted to teach readers about storms. Think about a storm that you watched. What did you see and hear? Write about it.

Comprehension Check

Retell the Story

Use the Retelling Cards to retell the selection.

Retelling Cards

Think and Compare

1. Reread page 109. Based on these facts, what do you think people do when a tornado is coming? **Reread: Make and Confirm Predictions**

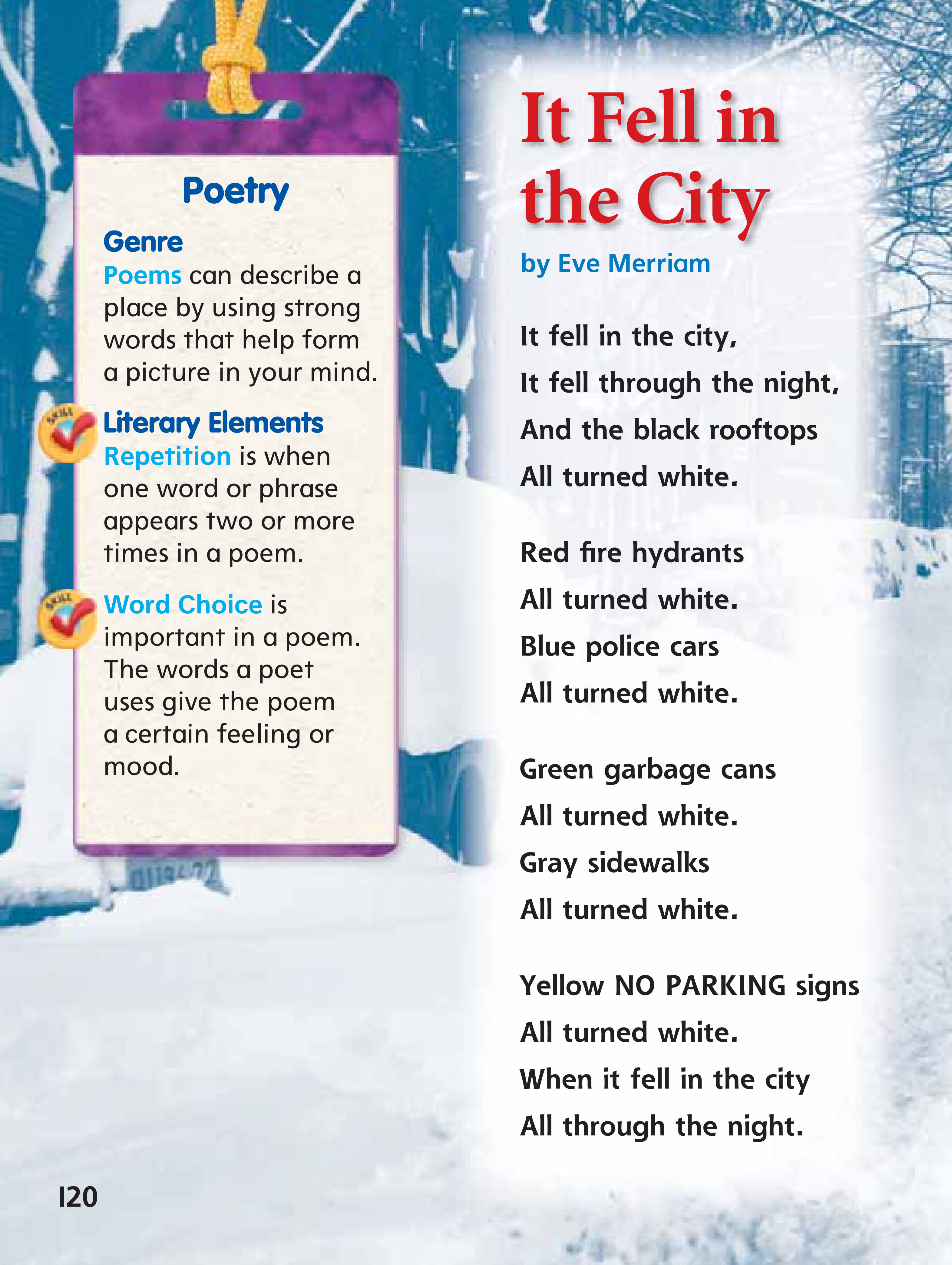
What I Predict	What Happens

2. Reread pages 110–111. What can you do to **prevent** problems from storms? **Apply**

3. Use what you have read to predict what might happen if a hurricane hits your town. **Synthesize**

4. Why is it important for people to study different weather conditions? **Evaluate**

5. What new information about hurricanes did you find in "Wild Weather Hits Florida" on pages 94–95 that was not in *Super Storms*? **Reading/Writing Across Texts**



Poetry

Genre

Poems can describe a place by using strong words that help form a picture in your mind.

Literary Elements

Repetition is when one word or phrase appears two or more times in a poem.

Word Choice is important in a poem. The words a poet uses give the poem a certain feeling or mood.

It Fell in the City

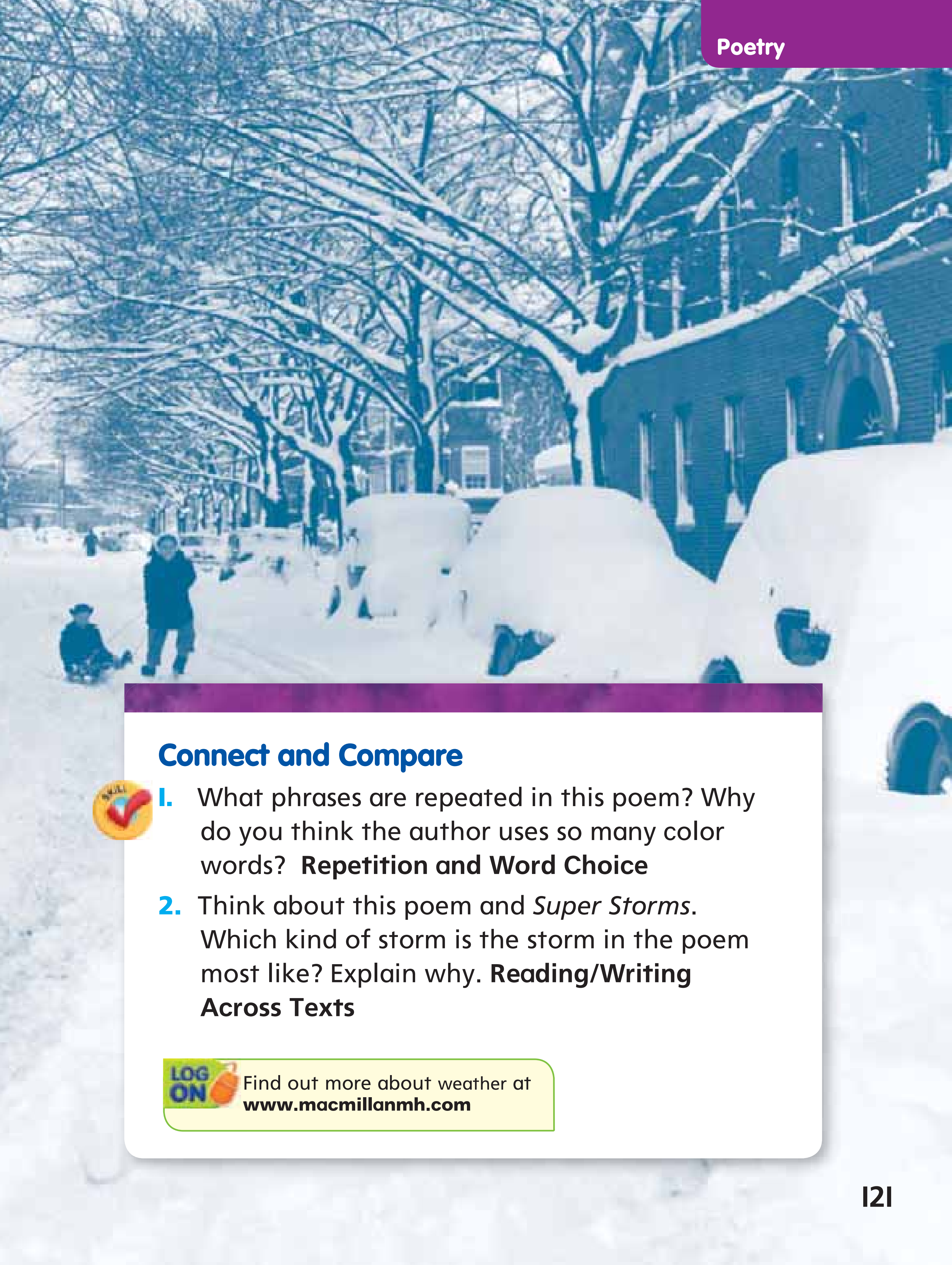
by Eve Merriam

It fell in the city,
It fell through the night,
And the black rooftops
All turned white.

Red fire hydrants
All turned white.
Blue police cars
All turned white.

Green garbage cans
All turned white.
Gray sidewalks
All turned white.

Yellow NO PARKING signs
All turned white.
When it fell in the city
All through the night.



Connect and Compare

1. What phrases are repeated in this poem? Why do you think the author uses so many color words? **Repetition and Word Choice**
2. Think about this poem and *Super Storms*. Which kind of storm is the storm in the poem most like? Explain why. **Reading/Writing Across Texts**

LOG ON Find out more about weather at **www.macmillanmh.com**

Write a Comparison/Contrast Paragraph

Writer's Craft

Vary Sentences
Good writers use important details to support their main ideas. They include sentences of different lengths.

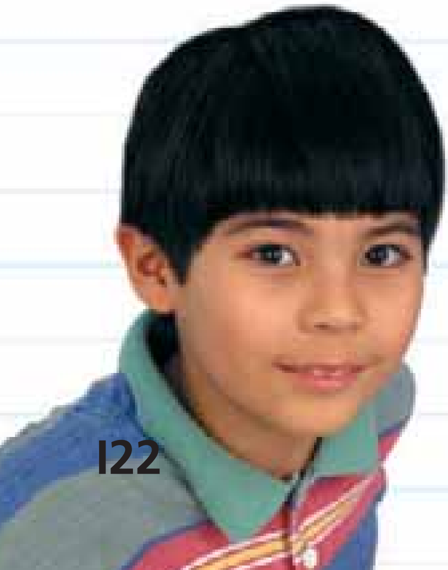
The signal word both helps me to explain how rain and snow are alike.

I used sentences of different lengths.

Rain and Snow

by Pedro V.

Rain and snow are kinds of weather. Both give living things the water they need. Both rain and snow form because of the water cycle. When clouds have too much water, the water falls to Earth as rain or snow. The big difference between snow and rain is temperature. It must be below freezing for snow to fall. If it is above freezing, it rains.



Your Turn

Write a paragraph that compares and contrasts two kinds of weather. Include details that explain how they are alike and how they are different. Use signal words such as *both* and *different* to help make your meaning clear. Then use the Writer's Checklist to check your writing.

Writer's Checklist

☐ **Sentence Fluency:** Did I vary sentences by including sentences of different lengths?

☑ **Organization:** Do I explain how two types of weather are alike and how they are different?

☑ **Word Choice:** Did I use signal words to tell if I am comparing or contrasting?

☑ **Conventions:** Did I use irregular verbs correctly?

Your Turn

Write a paragraph that compares and contrasts two kinds of weather. Include details that explain how they are alike and how they are different. Use signal words such as *both* and *different* to help make your meaning clear. Then use the Writer's Checklist to check your writing.

Writer's Checklist

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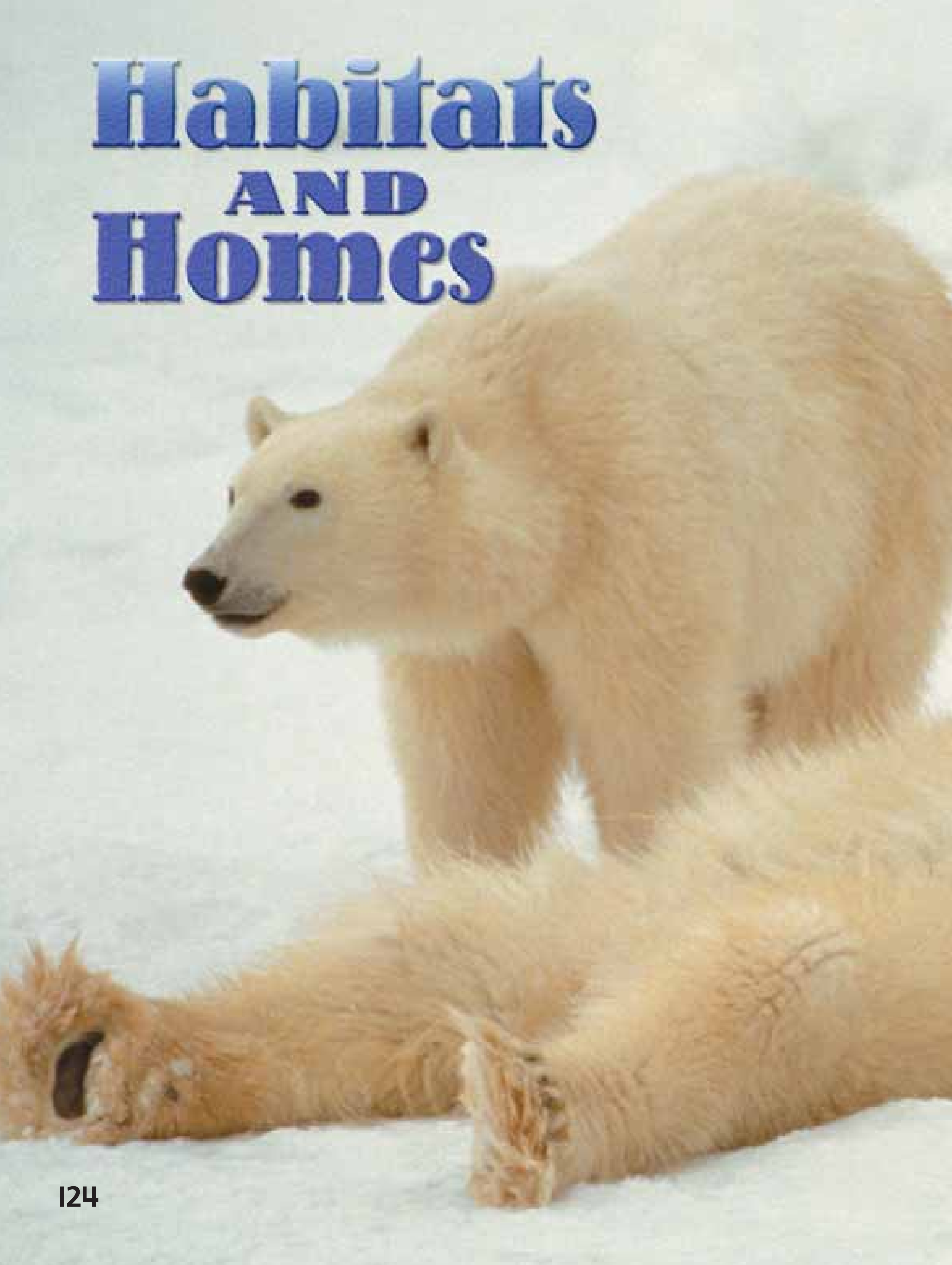
☑ **Conventions**: Did I use irregular verbs correctly?

Habitats and Homes



Talk About It

How are habitats different for animals and humans?

LOG ON Find out more about habitats and homes at **www.macmillanmh.com**

Vocabulary

beloved
promised
wiggled
gleamed
glanced
noble

Word Parts

Word endings added to the end of a verb can tell you when an event took place. The ending *–ed* shows that the action was in the past.

gleam + *ed* =
gleamed

My Home in Alaska

Dear Katie,

I am so happy to meet my new pen pal! I live in an Eskimo village in Alaska. I live with my parents and my **beloved** grandfather. I love him more than almost anybody!

I want to tell you about going with Grandpa to the tundra near my home. Grandpa had **promised** to show me a wolf. Last Sunday he kept his word.

We got up early. I put on my heavy sweater and **wiggled** into my boots. They were a tight fit so I moved my feet quickly from side to side to get them on.

Grandpa and I traveled by dog sled. The snow **gleamed** in the sun. It shone so bright that we wore sunglasses. We stopped on a frozen lake. Grandpa **glanced** around, looking quickly in each direction. Then his eyes stopped. I looked at the same place. A wolf pack was near the lake. The **noble** wolves stood together. They looked impressive and as proud as kings. I will never forget those amazing animals.

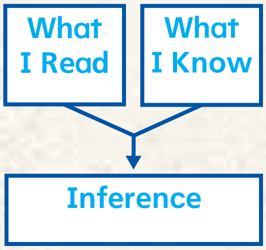
Your new friend,
Jean

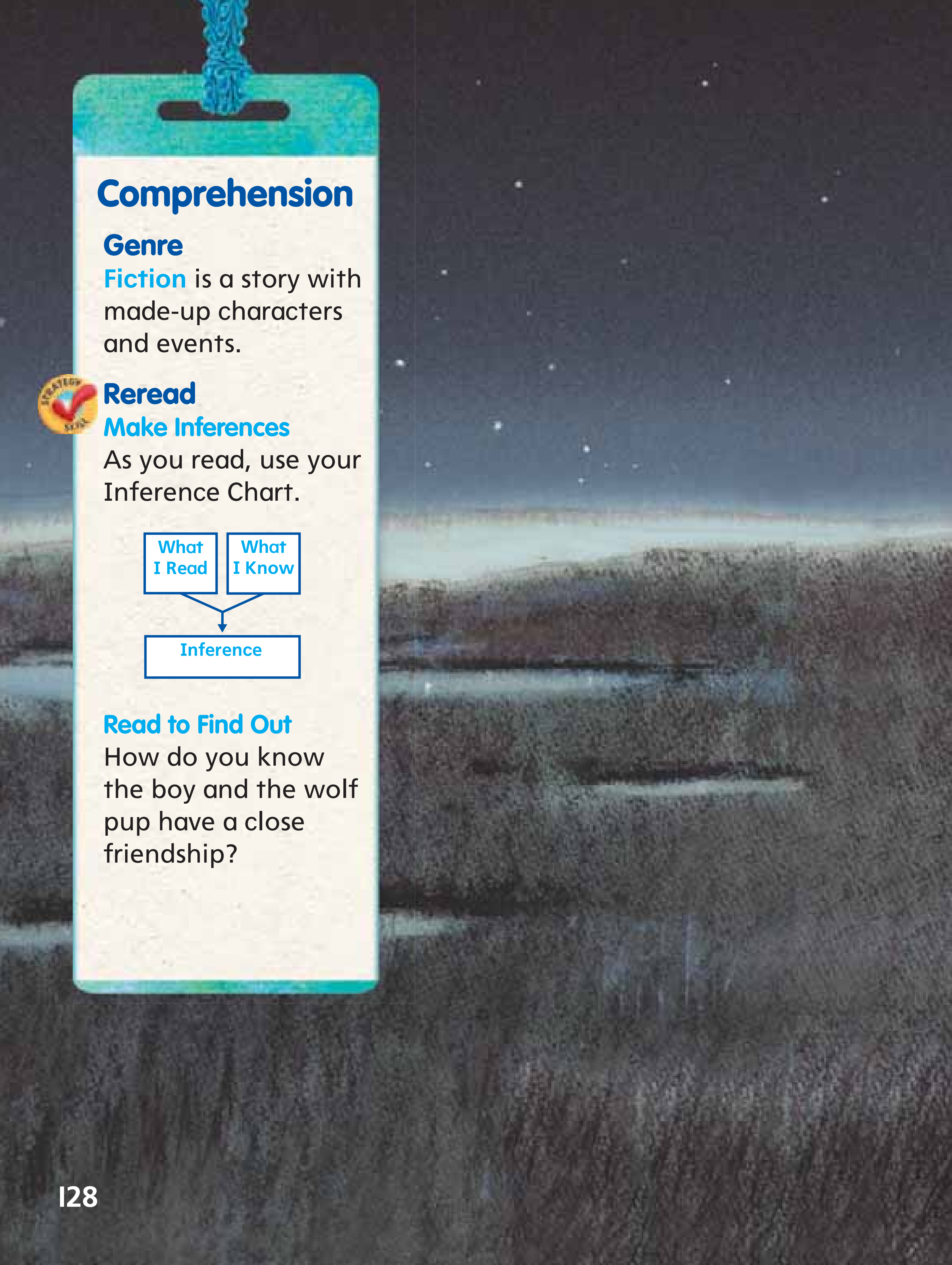
Reread for Comprehension

Reread

Make Inferences

Rereading a story and using what you already know can help you figure out something, or make an inference, about a character. Reread the selection and use the chart to help you make inferences about Jean.





Comprehension

Genre

Fiction is a story with made-up characters and events.

Reread

Make Inferences

As you read, use your Inference Chart.

What I Read
What I Know
Inference

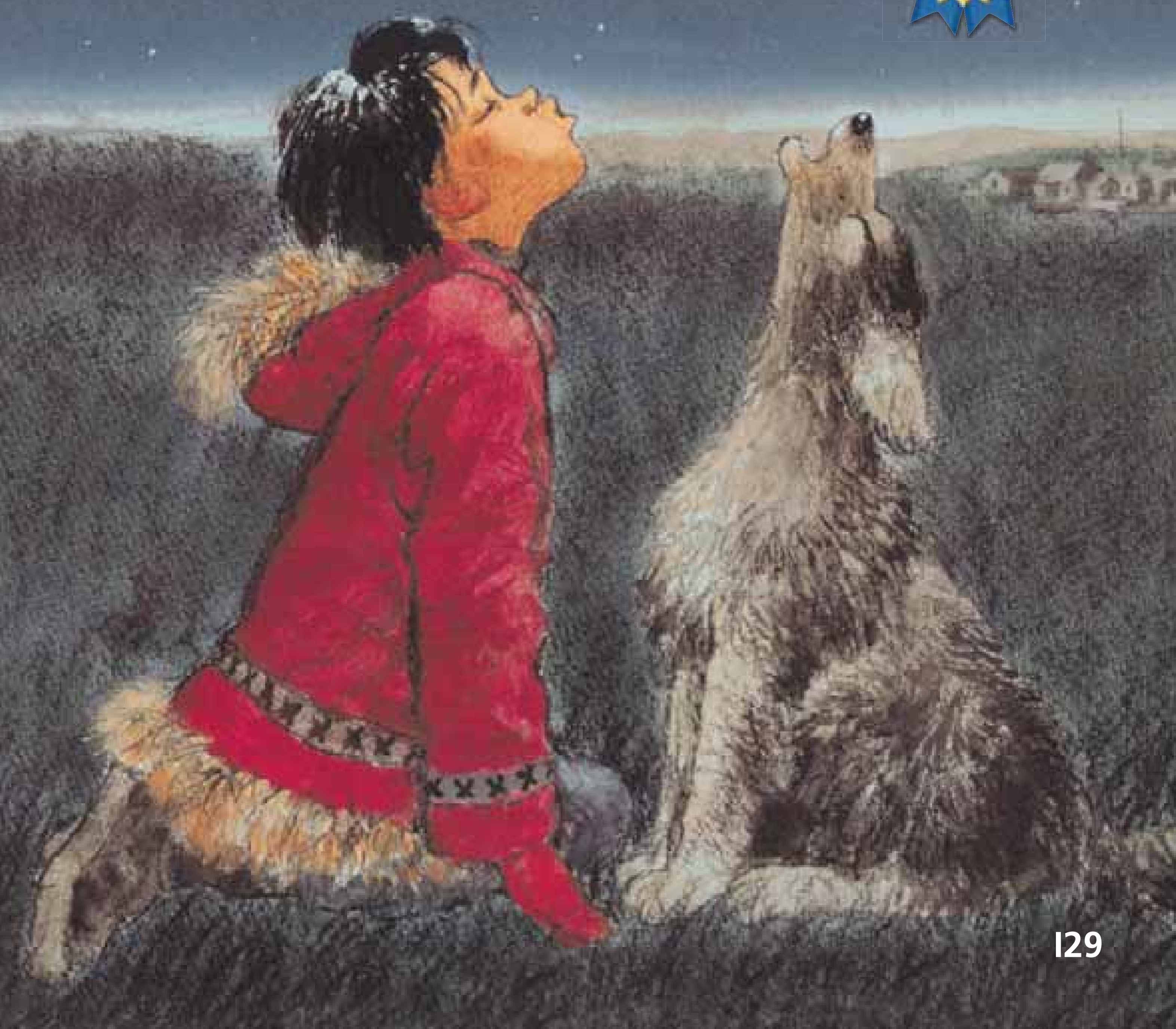
Read to Find Out

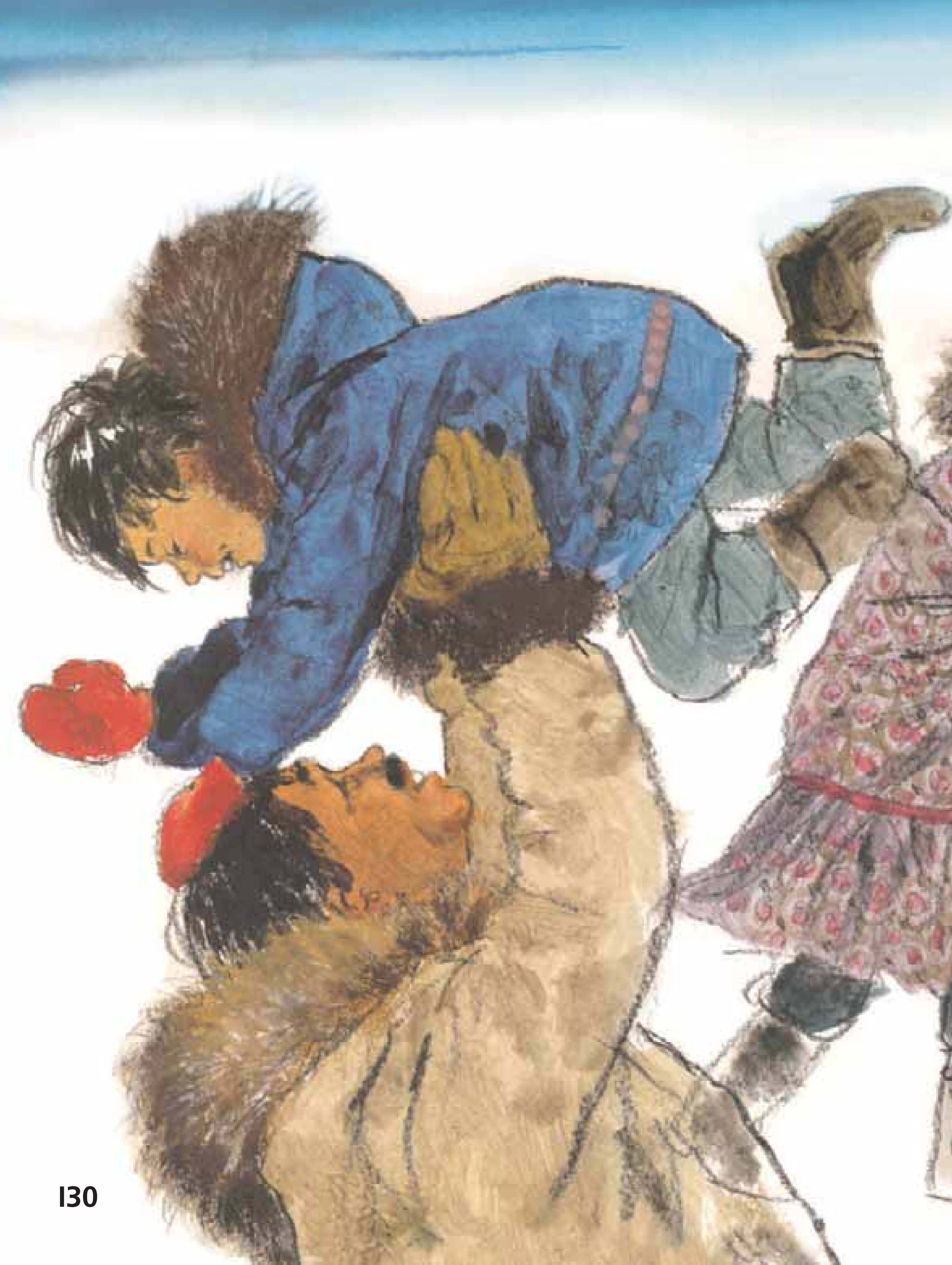
How do you know the boy and the wolf pup have a close friendship?

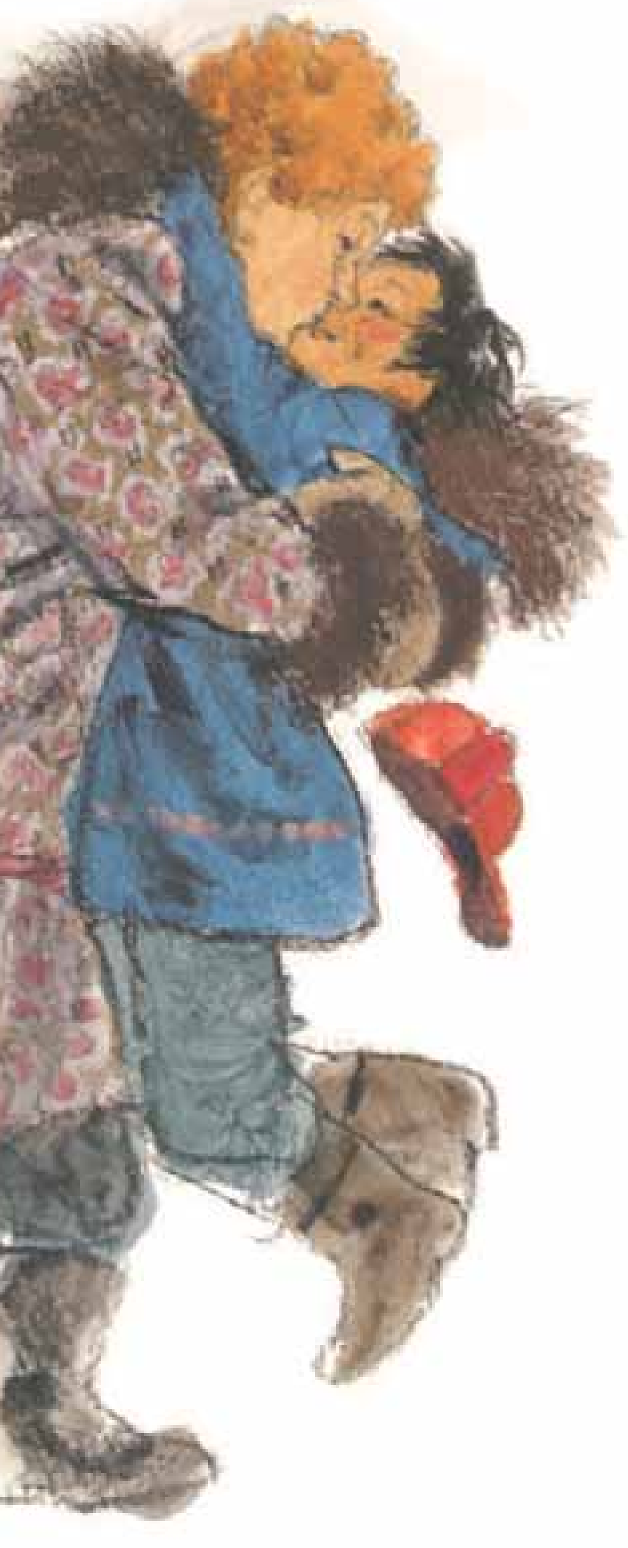
Nutik, the Wolf Pup

by Jean Craighead George
illustrated by Ted Rand

Award Winning Author







In an Eskimo village at the top of the world lived a lively little boy. He was not very old, but he could run as fast as a bird's shadow.

When he ran, his father, Kapugen, the great hunter, caught him and lifted him high over his head.

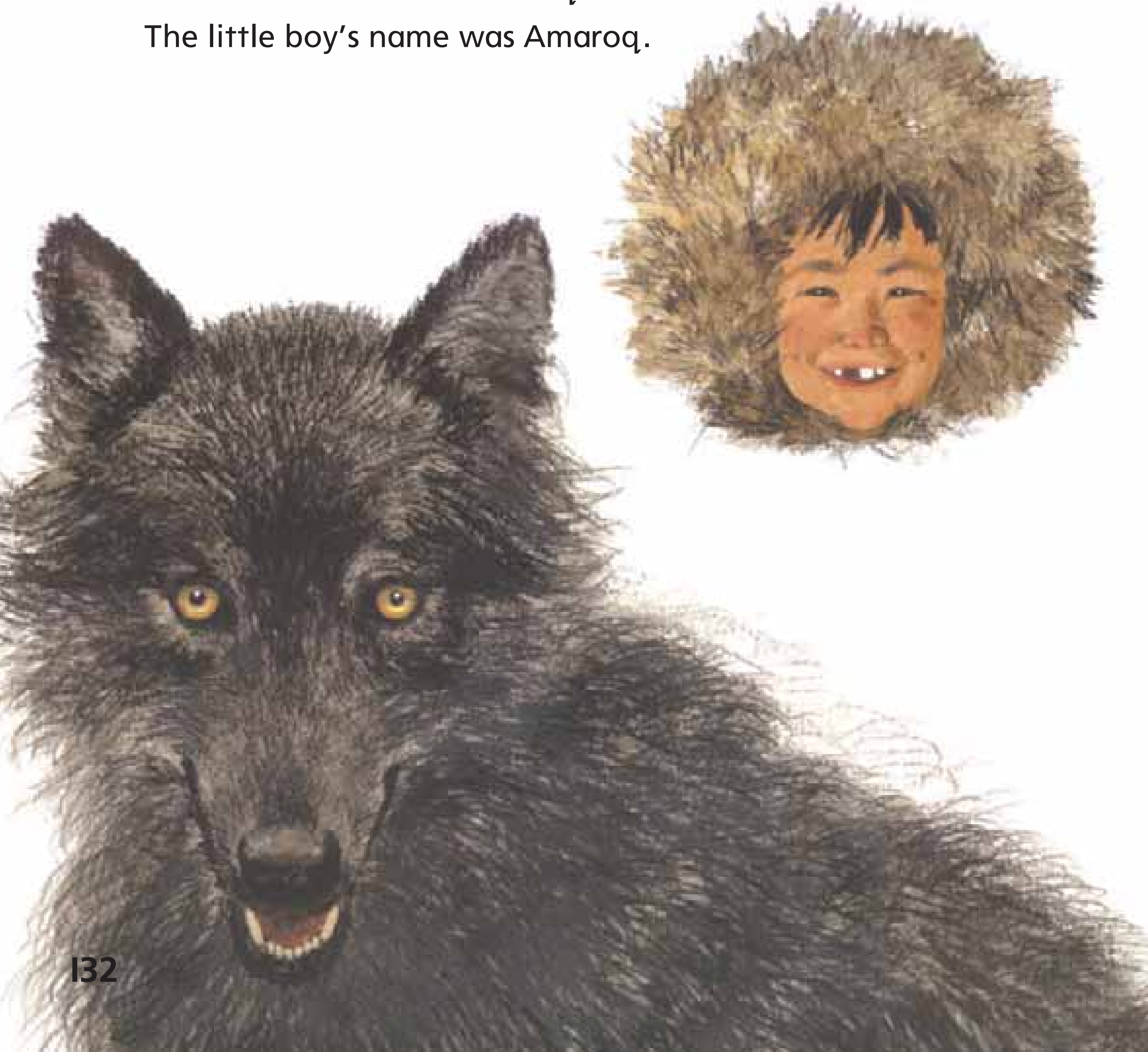
When he ran, his mother, Ellen, caught him and hugged him closely.

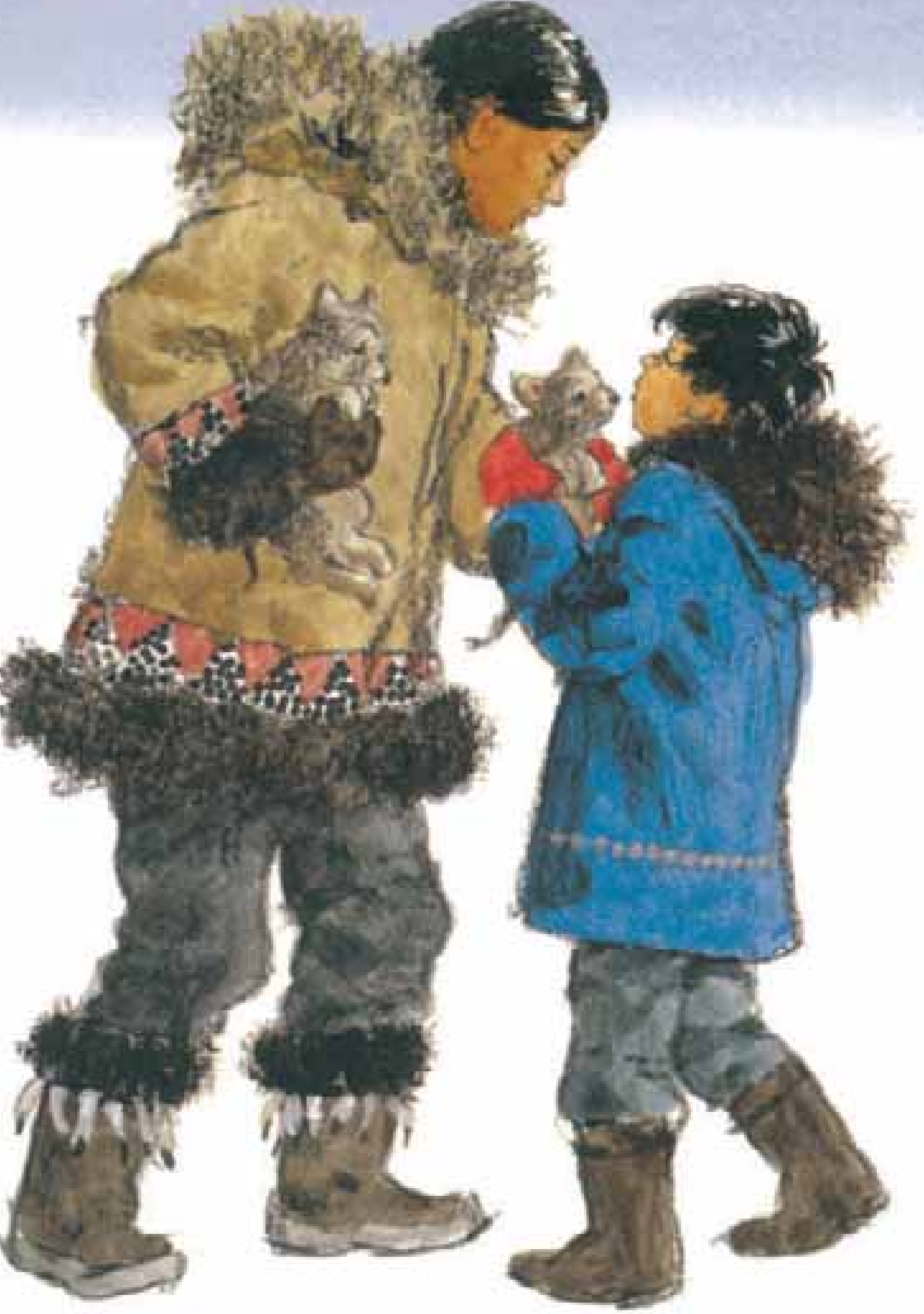
When he ran, his big sister, Julie, caught him and carried him home to tell him wolf stories.

She told him how a wolf pack had saved her life when she was lost and starving on the vast tundra. The wolf pack's **noble** black leader had shared his family's food with her.

The wolf's name was Amaroq.

The little boy's name was Amaroq.





One day Julie came home with two pups. They were hungry and sickly. She put one in Amaroq's arms.

"Feed and tend this pup," she said. "His name is Nutik. I will feed and tend the other pup. I named her Uqaq. When they are fat and well, the wolves will come and get them."

Amaroq hugged his pup. He felt the little wolf heart beat softly. He kissed the warm head.

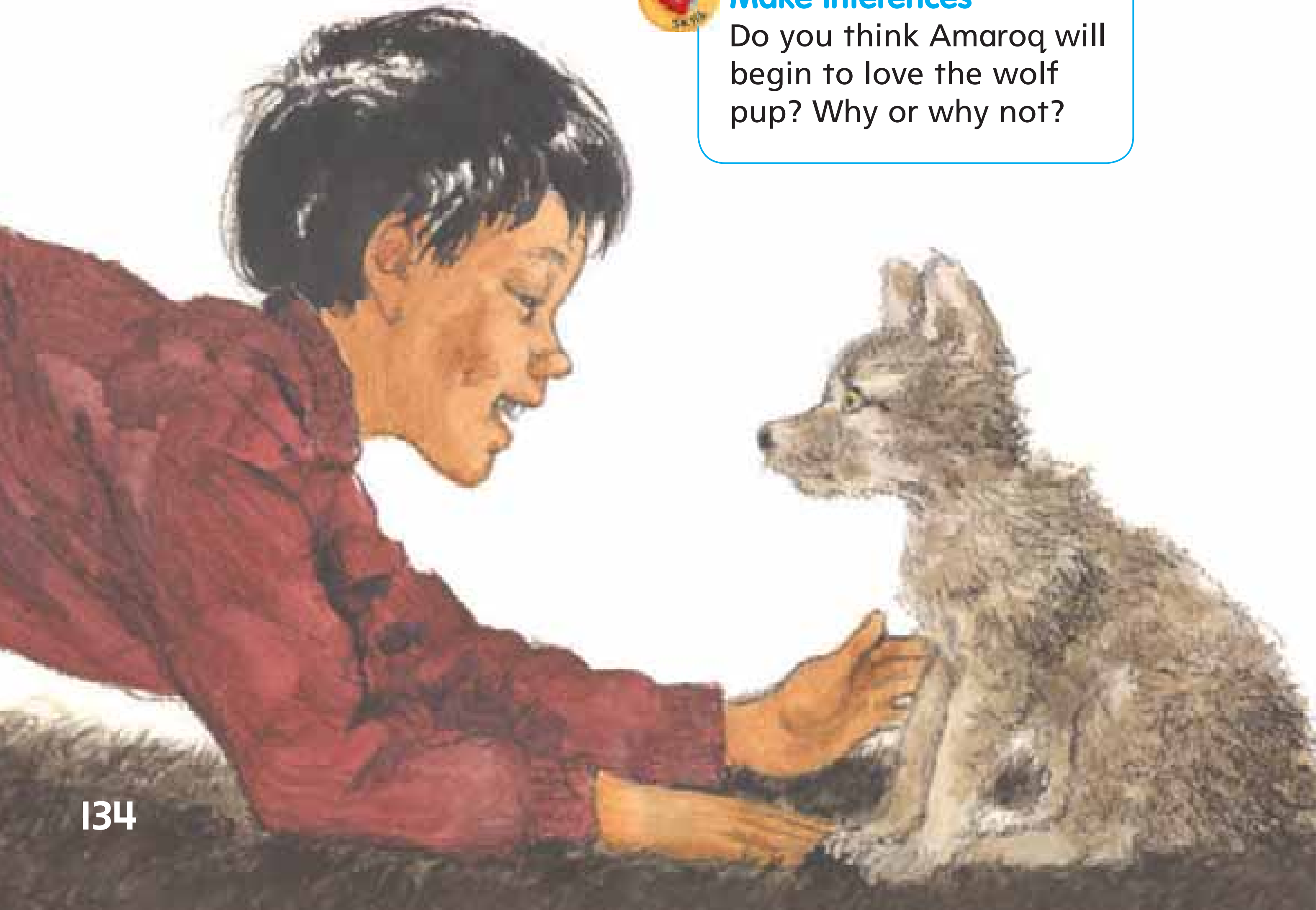
"Amaroq," Julie said when she saw this, "do not come to love this wolf pup. I have **promised** the wolves we will return the pups when they are fat and well."

Amaroq looked into Nutik's golden eyes. The wolf pup licked him and wagged his tail. Julie frowned.

"Don't fall in love, Amaroq," she warned again, "or your heart will break when the wolves come and take him away."

"No, it won't," he said.

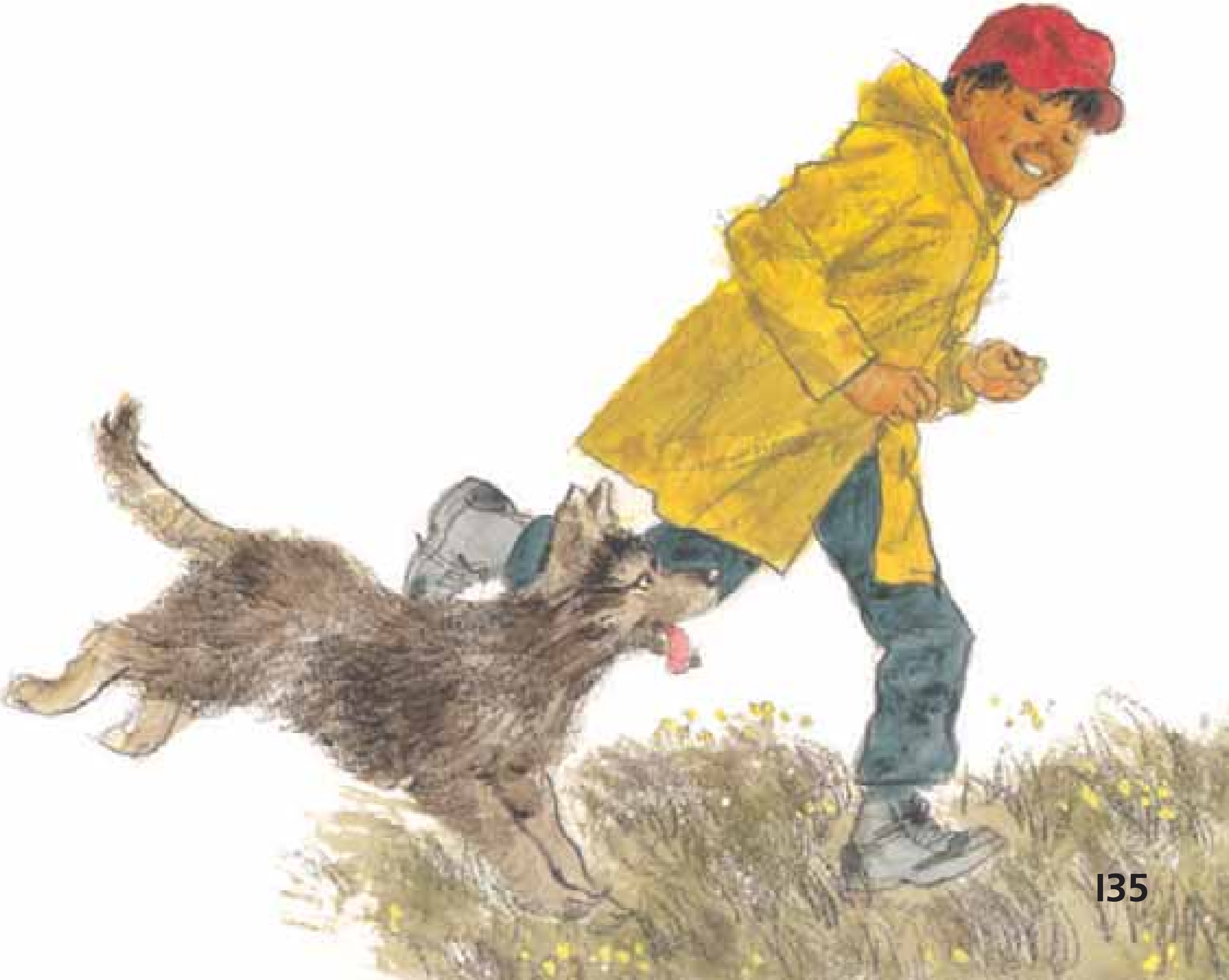
Make Inferences
Do you think Amaroq will begin to love the wolf pup? Why or why not?

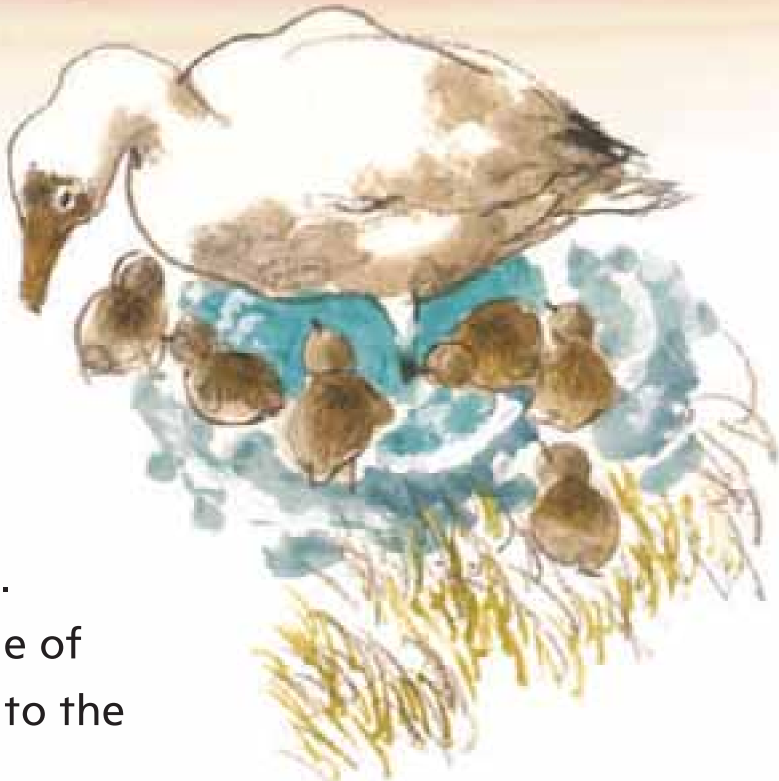


Julie gave Amaroq a bottle of milk to feed to his pup. Amaroq wrapped Nutik in soft rabbit skins, and they snuggled down on the grizzly-bear rug.

Every day Amaroq fed Nutik many bottles of milk, bites of raw meat, and bones to chew.

When the moon had changed from a crescent to a circle and back again, Nutik was fat. His legs did not wobble. His fur **gleamed**. He bounced and woofed. When Amaroq ran, Nutik ran.



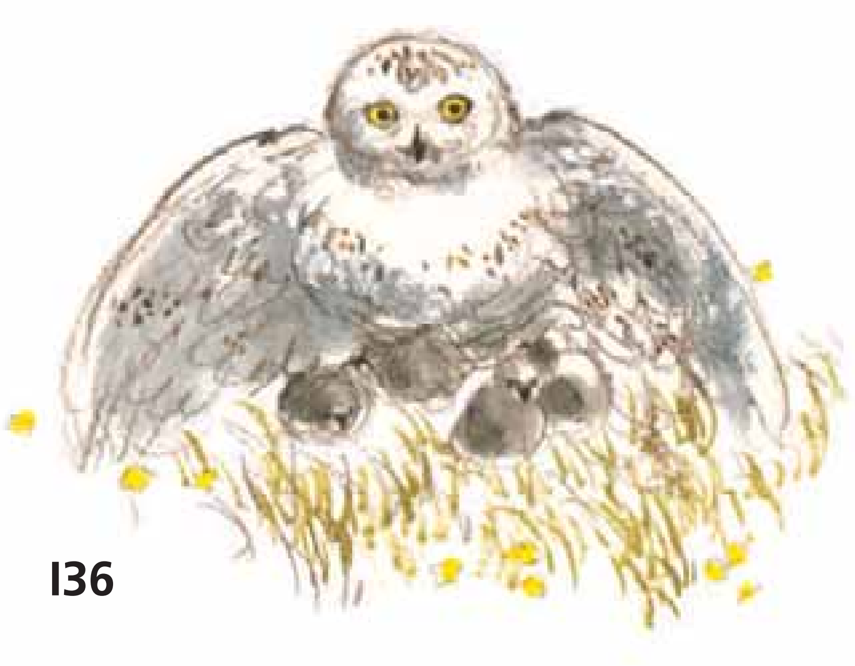


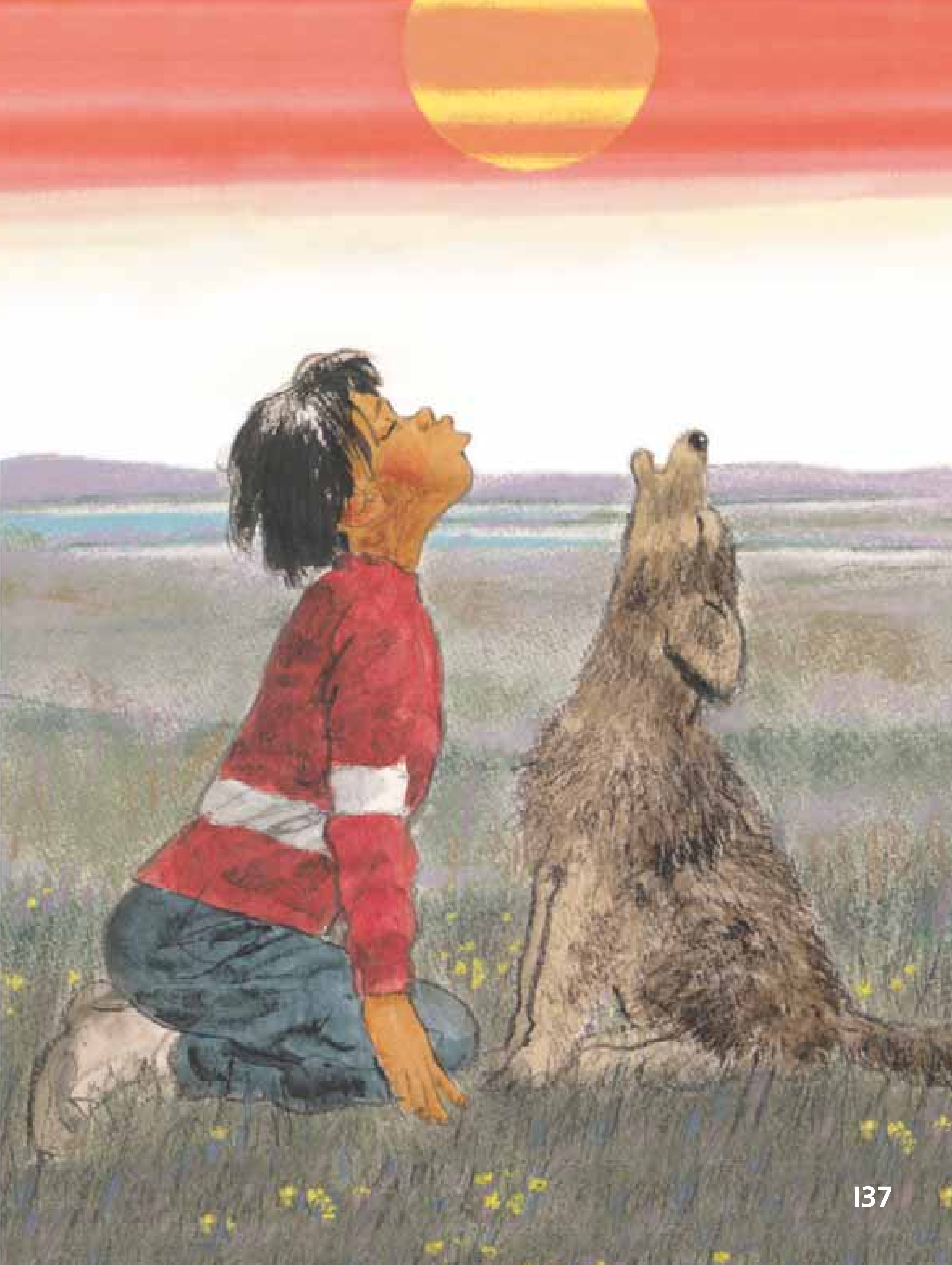
Summer came to the top of the world. The sun stayed up all day and all night for three beautiful months.

Because of this, Amaroq and Nutik lived by a different clock.

They fell asleep to the gabble of baby snow geese. They awoke to the raspy hiss of snowy owlets.

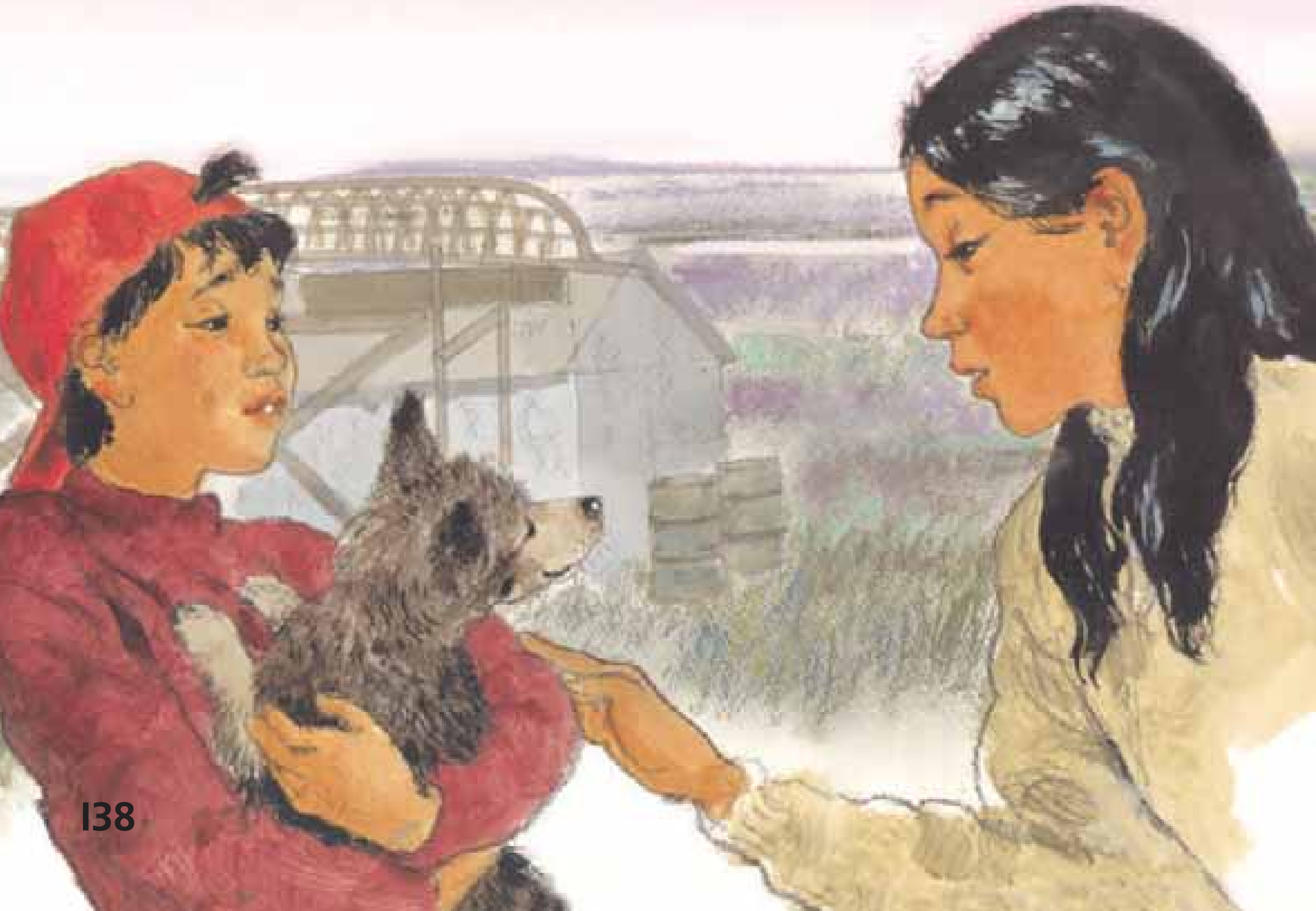
They ate when they were hungry. They slept when they were tired, and they played wolf games in shadow and sun. They were never apart.





“Don’t fall in love with Nutik,” Julie warned again when the midnight sun was riding low. “I hear the wolves calling. Soon they will come for their pups.” She looked at him. “Be strong.”

“I am strong,” he answered. “I am Amaroq.”



One morning Amaroq and Nutik were tumbling on the mossy tundra when the wolf pack called. They were close by.

"Come home. Come home," they howled.

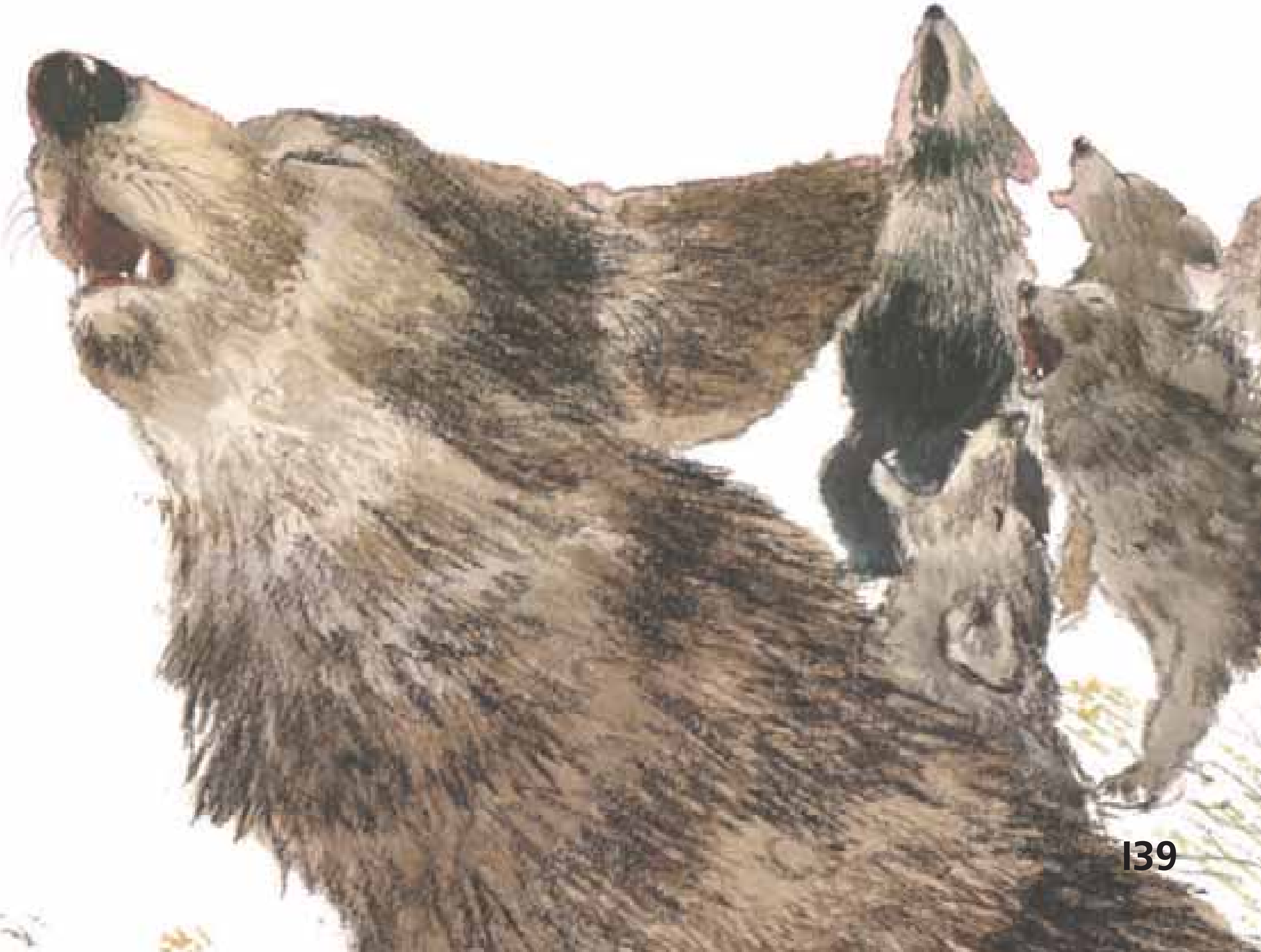
Nutik heard them.

Uqaq and Julie heard them.

Amaroq heard them. He got to his feet and ran.

Nutik stopped listening to the wolves and ran after him.

Amaroq led Nutik as fast as a falling star. He led him down a frost heave. He led him around the village schoolhouse. He led him far from the wolves.

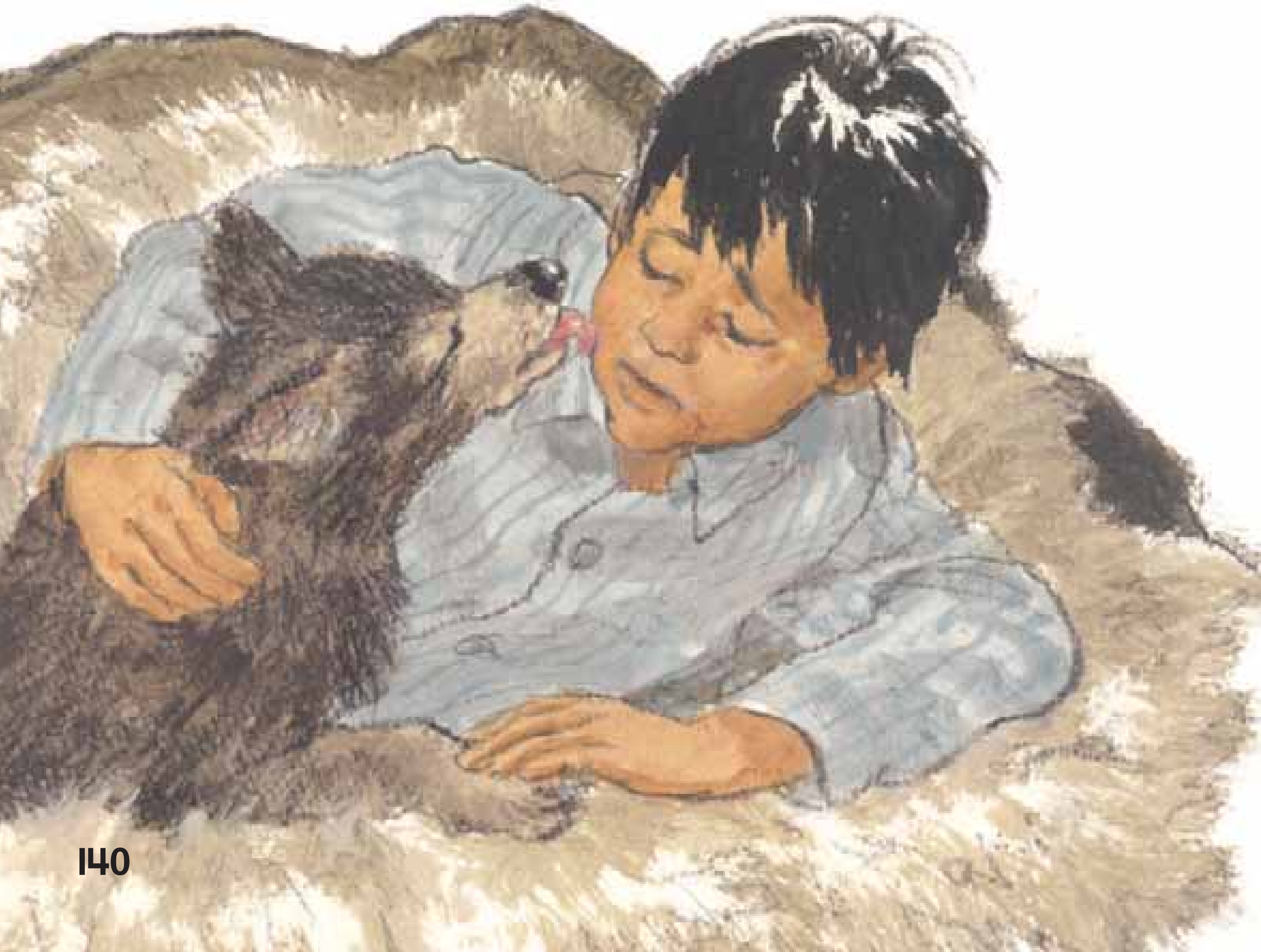


After a long time he led Nutik home. Julie was at the door.

"Uqaq has returned to her family," she said. "The wolves came and got her. Nutik is next."

"I am very tired," Amaroq said, and he rubbed his eyes.

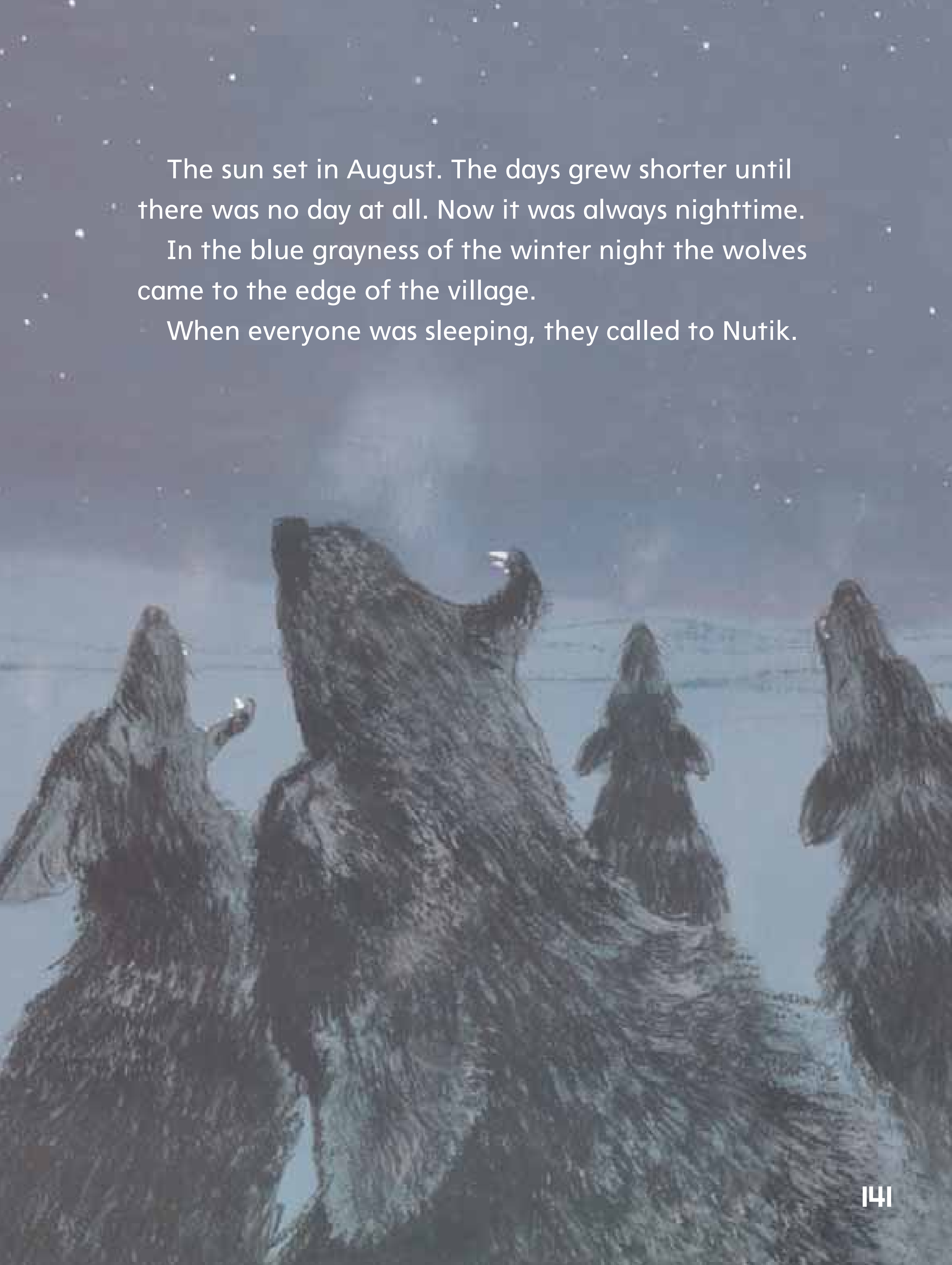
Julie put him to bed in his bearskin sleeping bag. When Julie tiptoed away, Nutik **wiggled** into the sleeping bag too. He licked Amaroq's cheek.



The sun set in August. The days grew shorter until there was no day at all. Now it was always nighttime.

In the blue grayness of the winter night the wolves came to the edge of the village.

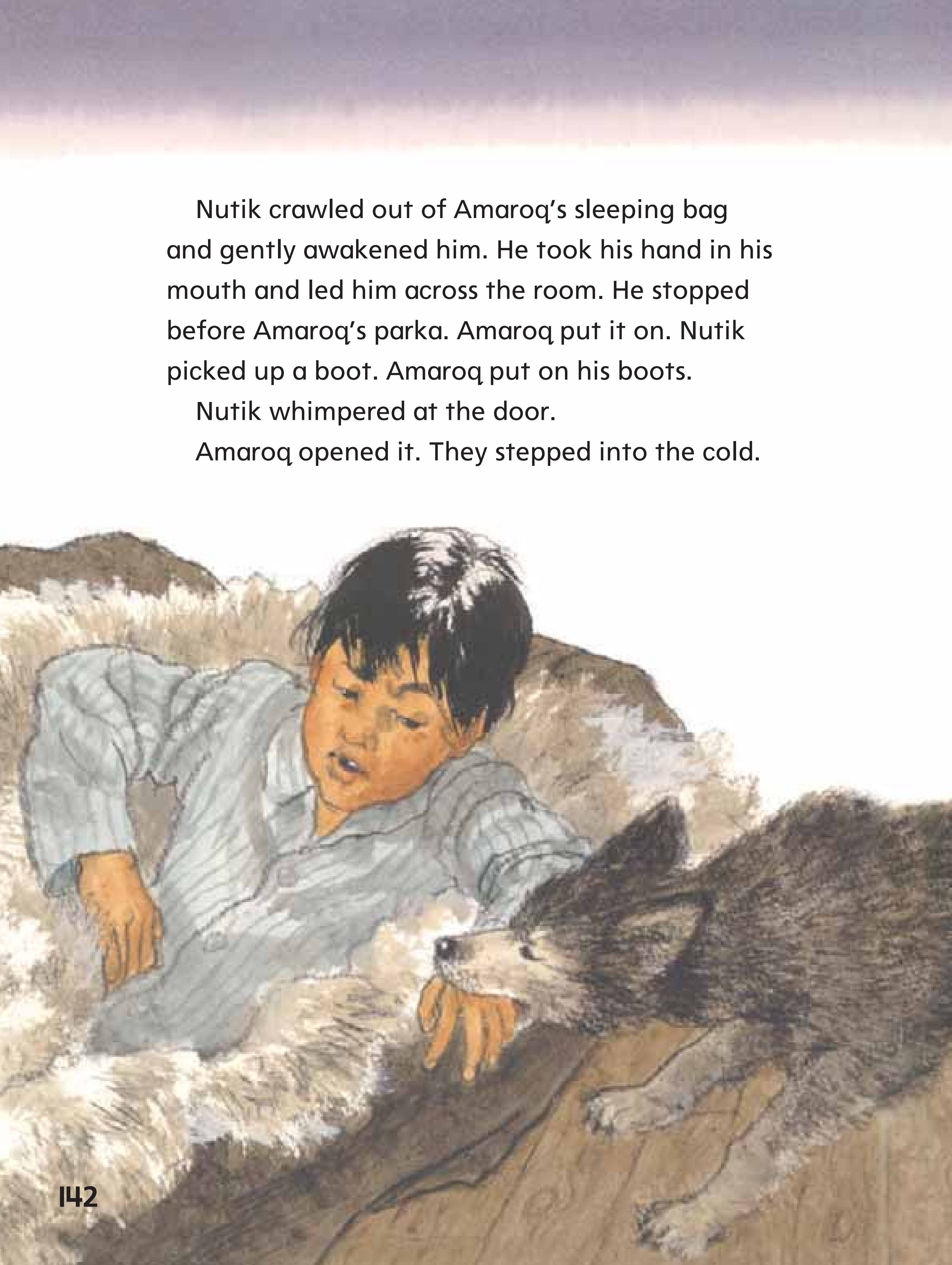
When everyone was sleeping, they called to Nutik.

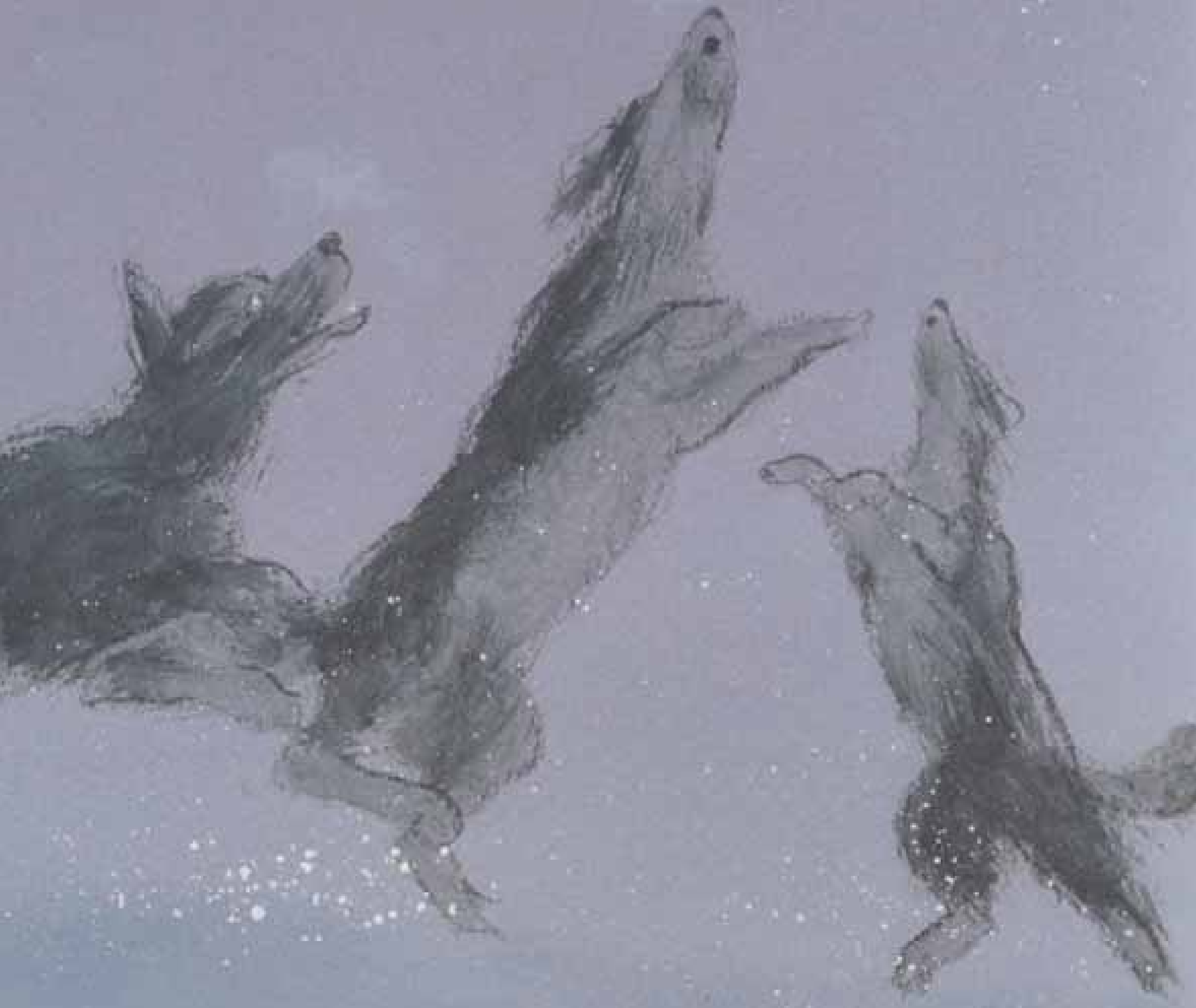


Nutik crawled out of Amaroq's sleeping bag and gently awakened him. He took his hand in his mouth and led him across the room. He stopped before Amaroq's parka. Amaroq put it on. Nutik picked up a boot. Amaroq put on his boots.

Nutik whimpered at the door.

Amaroq opened it. They stepped into the cold.





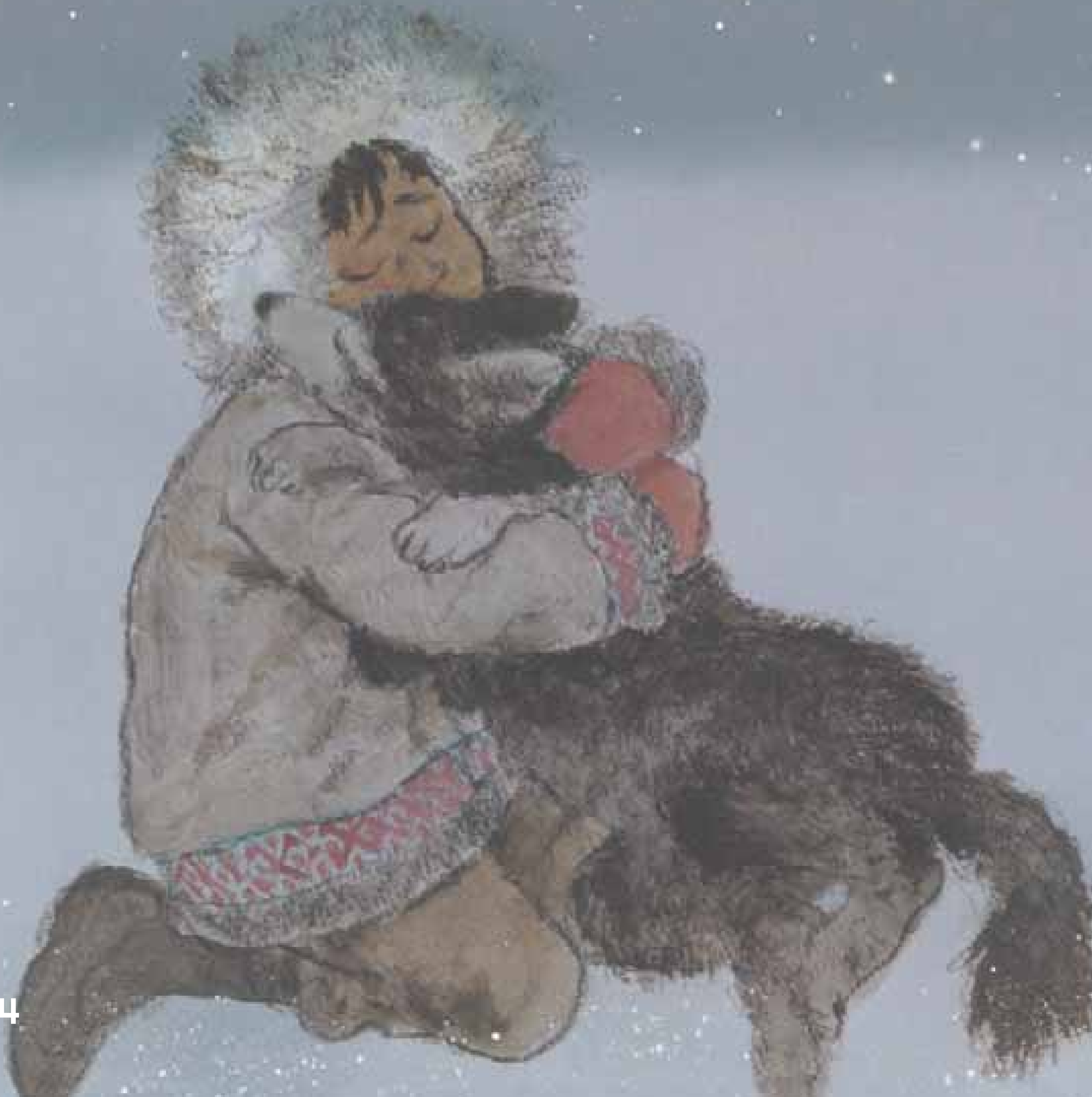
The wolves were prancing and dancing like ice spirits on the hill.

Nutik took Amaroq's mittened hand and led him toward his wolf family. The frost crackled under their feet. The wolves whispered their welcome.

Suddenly Amaroq stopped. Nutik was taking him to his wolf home.

"No, Nutik," he said. "I cannot go with you. I cannot live with your family." Nutik tilted his head to one side and whimpered, "Come."

"You must go home alone," Amaroq said, and hugged his **beloved** wolf pup for a long time.



Then he turned and walked away. He did not run. Nutik did not chase him.

"I am very strong," Amaroq said to himself.

He got home before his tears froze.

Amaroq crawled into his bearskin sleeping bag and sobbed. His heart was broken after all.

At last he fell asleep.

Julie awoke him for breakfast.

"I don't want to eat," he told her. "Last night the wolves came and took Nutik away."

"You are a strong boy," she said. "You let him go back to his family. That is right."

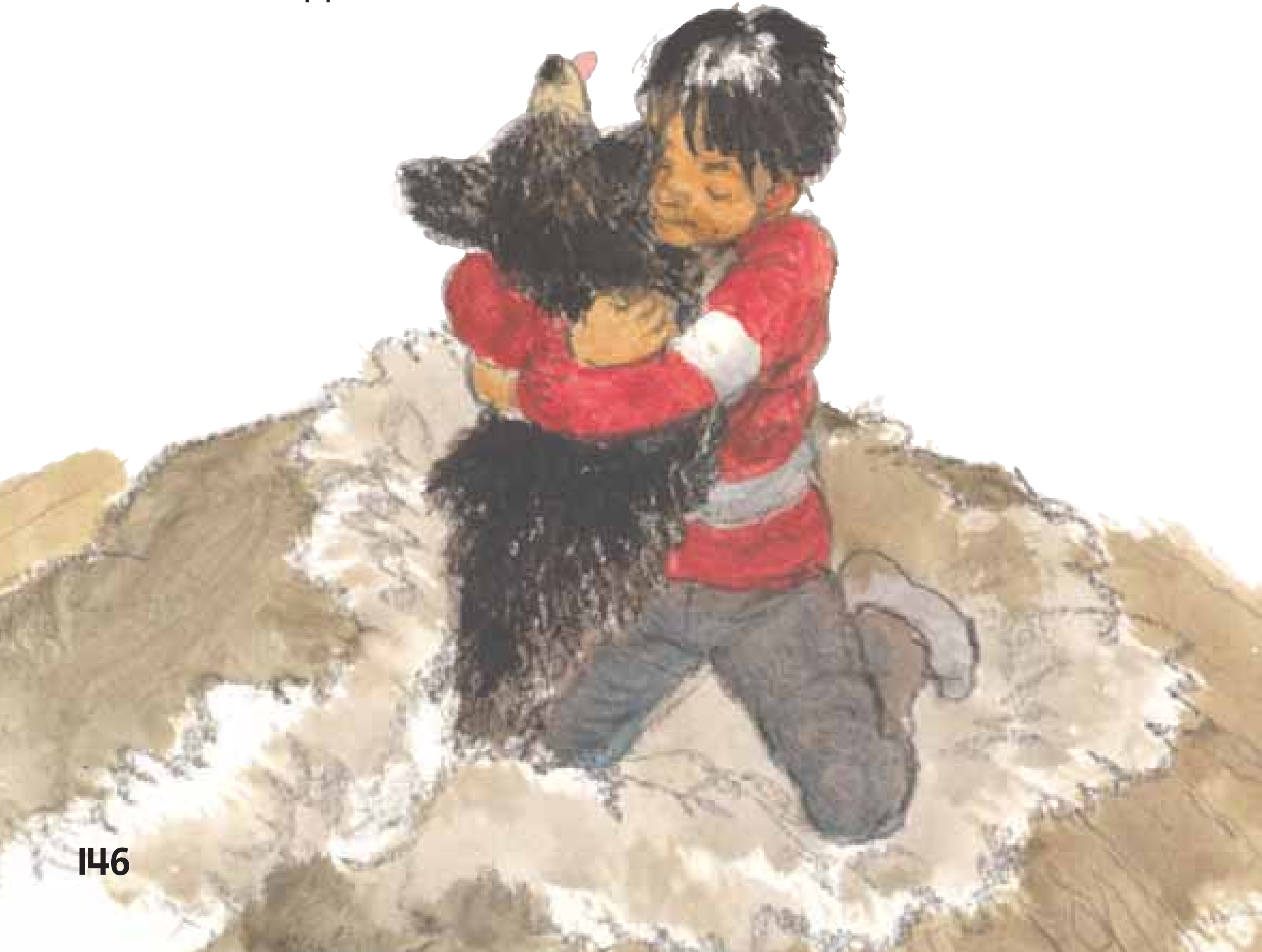
Make Inferences
Why do you think Amaroq let Nutik return to his wolf pack?

Amaroq did not eat lunch. When Kapugen took him out to fish, he did not fish. Tears kept welling up. He ran home to hide them in his bearskin sleeping bag.

It was surprisingly warm.

Up from the bottom and into Amaroq's arms wiggled the furry wolf pup.

"Nutik," Amaroq cried joyfully. He hugged his friend and **glanced** at Julie. Instead of scolding him, she stepped outside.



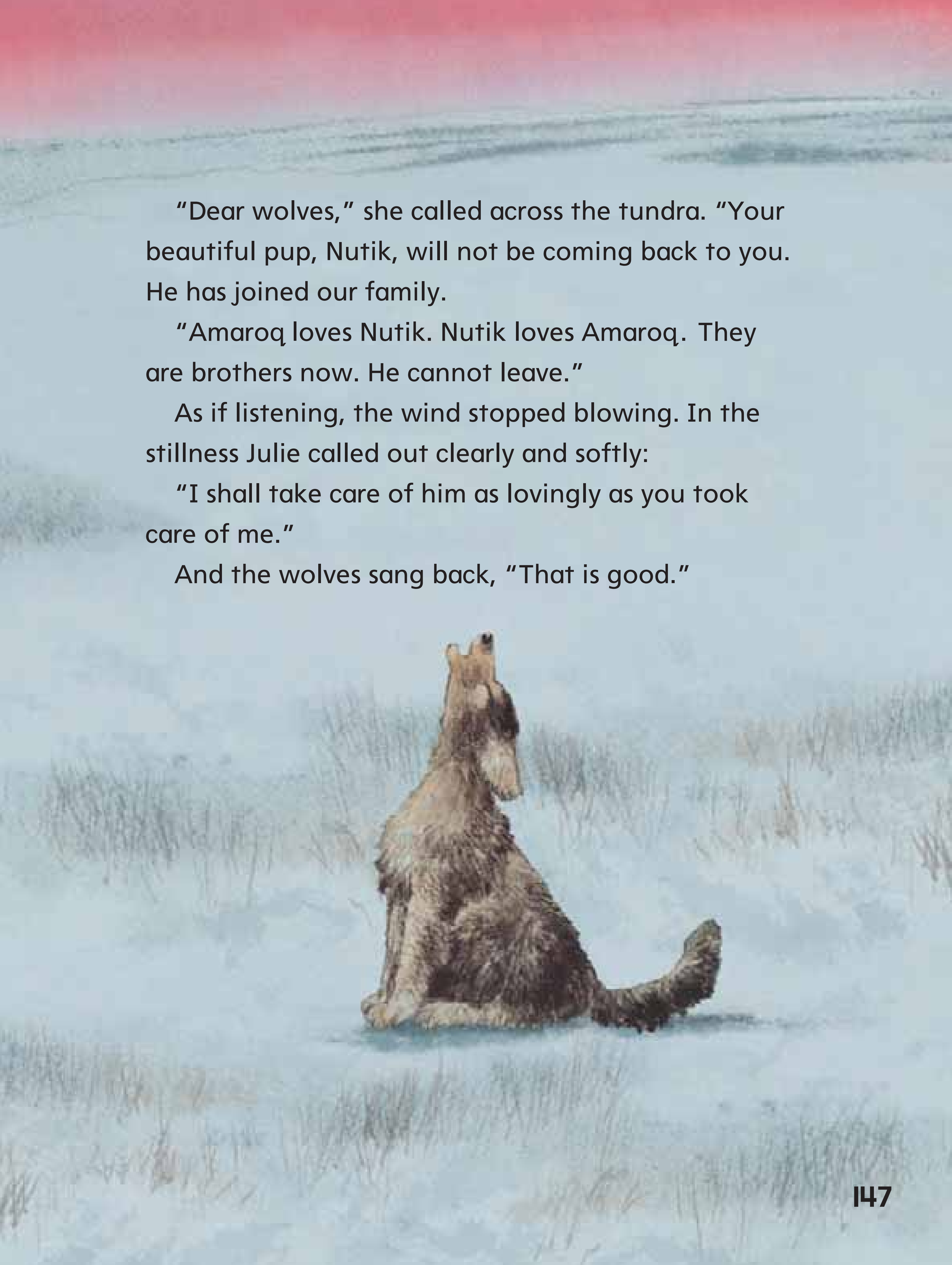
"Dear wolves," she called across the tundra. "Your beautiful pup, Nutik, will not be coming back to you. He has joined our family.

"Amaroq loves Nutik. Nutik loves Amaroq. They are brothers now. He cannot leave."

As if listening, the wind stopped blowing. In the stillness Julie called out clearly and softly:

"I shall take care of him as lovingly as you took care of me."

And the wolves sang back, "That is good."



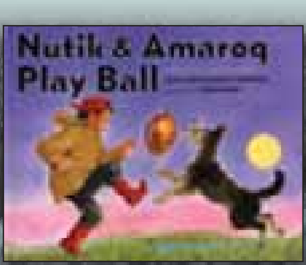
Meet the Author and Illustrator

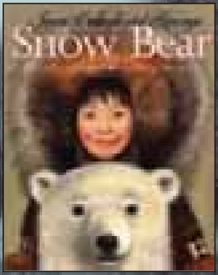
Jean Craighead George has written more than 100 children's books.

One summer, Jean went to Alaska to learn more about wolves. There, she saw a little girl walking on the lonely tundra. She also saw a beautiful male wolf. They became the characters for Jean's book *Julie of the Wolves*, for older readers. *Nutik, the Wolf Pup* is a follow-up to that book.

To draw the illustrations for *Nutik, the Wolf Pup*, **Ted Rand** went to Alaska. He wanted to see the tundra for himself. Ted has illustrated more than 60 children's books.

Other books written by Jean Craighead George





LOG ON Find out more about Jean Craighead George and Ted Rand at **www.macmillanmh.com**

Author's Purpose

Jean Craighead George wanted her story to take place in a village in Alaska. Would you like to live there? Write about your ideas.

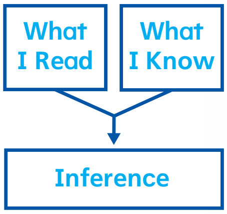
Comprehension Check

Retell the Story

Use the Retelling Cards to retell the story.

Retelling Cards

Think and Compare



1. Julie promised the wolves she will return the pups, so why does she let Nutik stay with Amaroq in the end? **Reread: Make Inferences**
2. Reread pages 134–135. Why does Julie keep warning Amaroq not to love Nutik? **Analyze**
3. If you were Amaroq, would you have let Nutik return to his wolf pack? Why or why not? **Evaluate**
4. Why is it important for Nutik to return to his wolf family and not spend too long with Amaroq? **Analyze**
5. Do you think Jean in "My Home in Alaska," on pages 126–127, and Amaroq might be friends? What are some things that they have in common? **Reading/Writing Across Texts**

Science

Genre

A Nonfiction Encyclopedia article gives information and facts about a topic.

Text Feature

Encyclopedia entries may have several sections. A Head tells what information is found in each section.

Content Vocabulary

habitats

roam

prey

WOLVES

Wolves are wild animals that are related to the dog family. They look similar to dogs, but they have longer legs and larger feet. They also have more powerful jaws.

Wolves live in different areas, or **habitats**. Some wolves are gray. Others are almost black. Wolves that live in north Alaska are white. All wolves have a long, bushy tail.

Habitat

Wolves live in forests or mountain habitats. They need lots of land because they move around. They **roam** 20 miles a day to look for food. Wolves are endangered animals. They used to live all over North America. Now they live in northern forests and Alaska.

Food

Wolves are hunters. They have a good sense of smell. This helps them find their **prey**. Wolves that live in forests eat mice, rabbits, deer, and moose. Wolves in Alaska also eat caribou or oxen. Finding food is not easy for wolves. Sometimes they follow a herd for several days. They swallow food in large pieces without chewing. Wolves can eat 20 pounds of meat at one time.

Life Cycle

The female gives birth to pups in the spring. First, she finds or digs a den. Often she will use the same den over and over. The cubs cannot see or hear when they are born. Their mother stays with them for about three weeks. During this time, the male brings food for the mother to eat.

After about a month, the pups can eat meat. All of the pack members hunt food for them. The female hunts, too. Another pack member takes care of the pups while she is away. By fall, the pups have learned to hunt. They are ready to travel with the pack.

Encyclopedia entries often have words in dark print called heads. These summarize what the following section will be about.

The Pack

Wolves live in family groups called packs. A pack may have 7 or 8 wolves. One male is the leader of the pack. He has a female mate. Their children are part of the pack, too. A pack may also have an aunt or an uncle.

Connect and Compare

1. In which section would you find information about where wolves live? What did you learn about in the section with the head "Food"? **Heads**
2. Think about the encyclopedia entry and *Nutik, the Wolf Pup*. Write a story about how Nutik's life would have been different if he never left his pack. **Reading/Writing Across Texts**

Science Activity

Research a type of wolf. Write facts about what the wolf looks like and where it lives.

LOG ON Find out more about wolves at **www.macmillanmh.com**

Write a Book Report

Writer's Craft

A Strong Conclusion

Writing a **strong conclusion** helps the reader understand the main idea of your writing.

A Report on Animals of the Sea and Shore

by Jan O.

I really liked Animals of the Sea and Shore by Ann O. Squire. The book describes many animals that live in or near the ocean. Some animals, like whales, live in the water. Other animals live on shore, like snails.

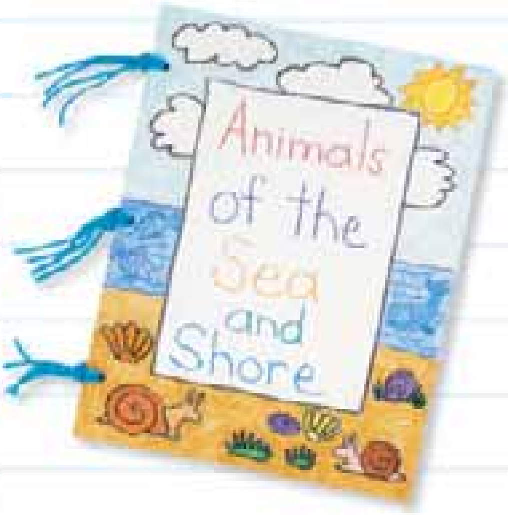
I also learned some unusual facts. Did you know that sea otters sleep floating on their backs? If you like learning about the creatures that live by the water, you'll like Animals of the Sea and Shore.

My report gives a short summary of the book's plot.

I wrote a strong conclusion to make my report clear.

Your Turn

Write a book report. Give the title and name the author. For picture books, include the name of the illustrator. Tell what the book is about and why you like it or don't like it. Write a good concluding sentence. Then use the Writer's Checklist to check your writing.


Animals of the Sea and Shore

Writer's Checklist

☐ **Ideas:** Did I write a good **concluding sentence** to make my ideas clear?

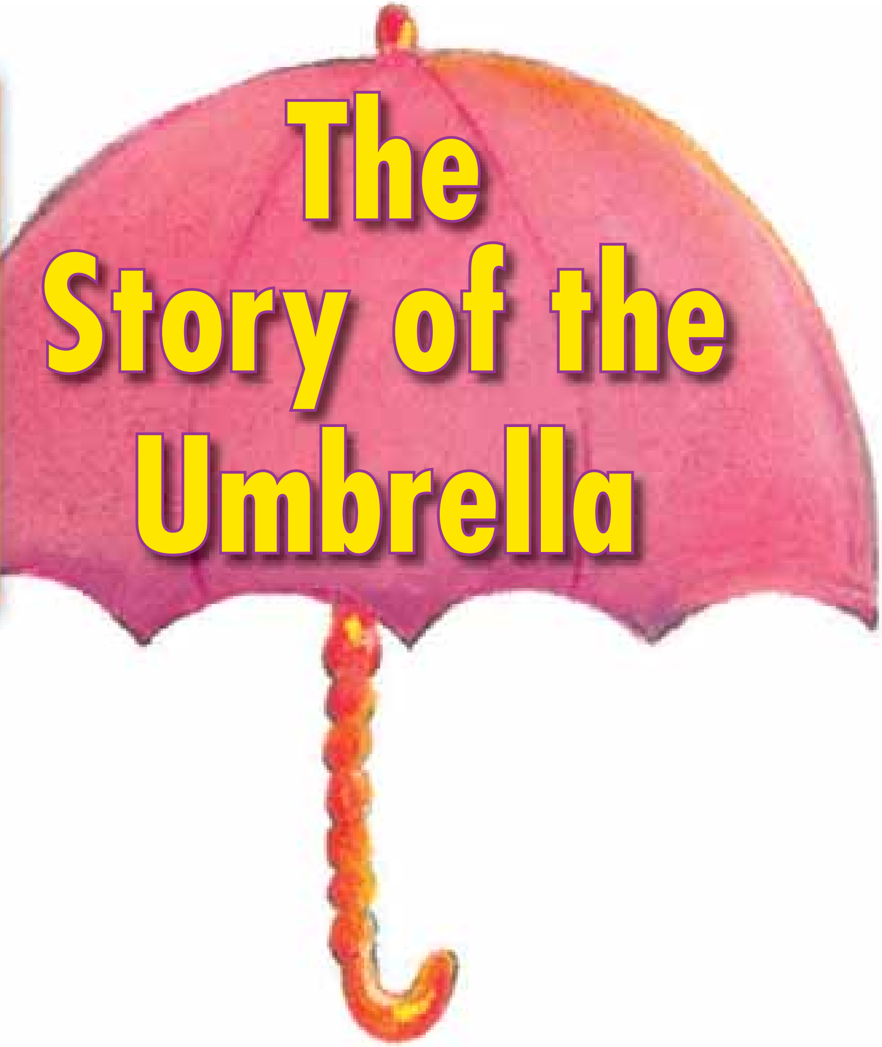
☑ **Organization:** Does my report give the title and author? Does it give a summary of the plot and tell how I felt about the book?

☑ **Conventions:** Did I use an apostrophe correctly in each contraction?

☑ **Voice:** Does the report sound like the way I talk?

Test Strategy

Author and Me
The answer is not there on the page. Connect the clues to figure it out.



The Story of the Umbrella

by Eric Demoff

When do you use an umbrella? On rainy days, of course! Well, not if you lived a very long time ago. People used an umbrella only on sunny days.

The word *umbrella* means shade. An umbrella would shade you from the sun. Maybe that is why an umbrella is in the shape of a tree. A tree shades you from the sun.

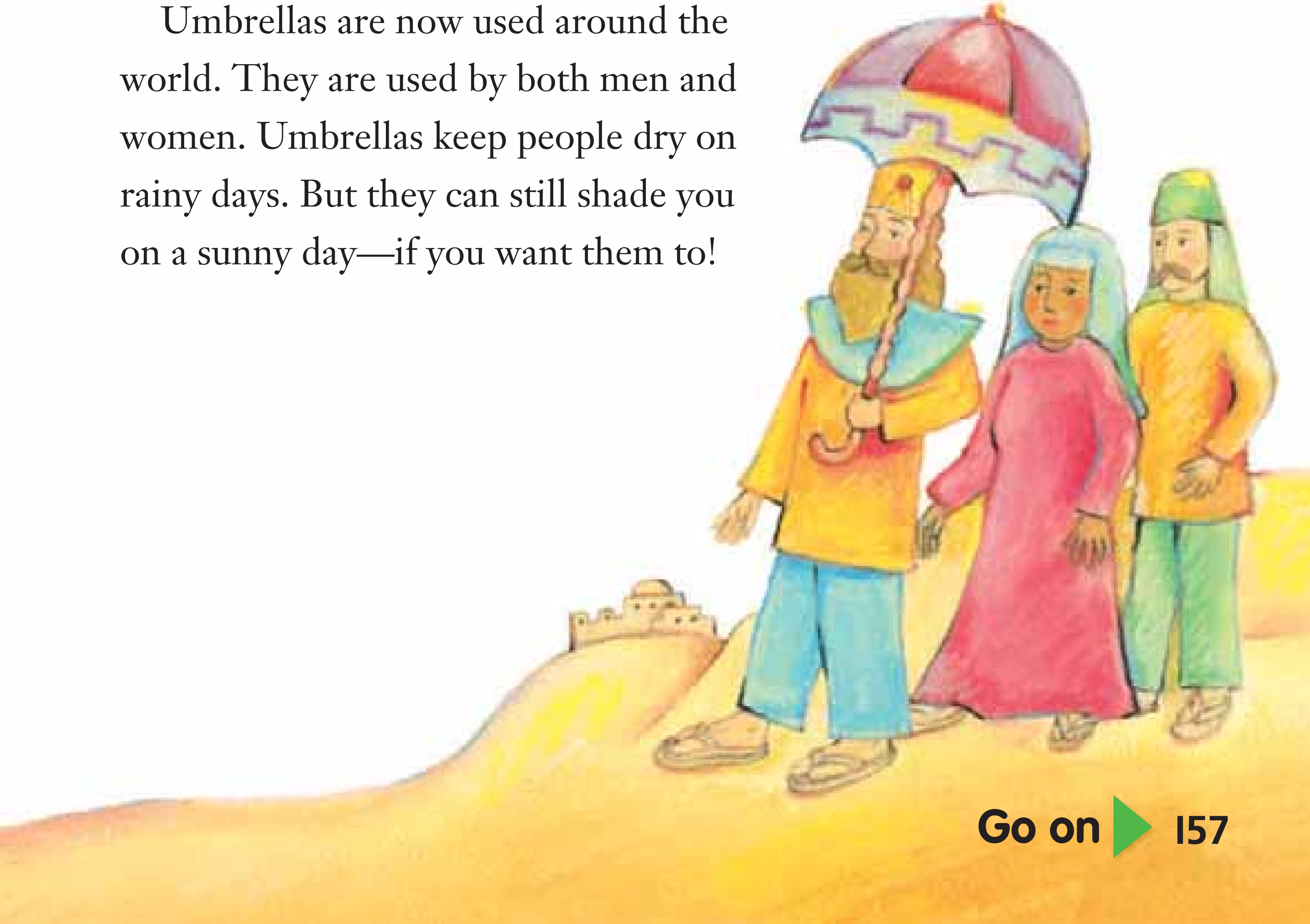
Go on

There is another reason why umbrellas were just for sunny days. The first umbrellas were made of paper. You could never use one in the rain.

At first, only kings carried umbrellas. An umbrella made you look important. Thousands of years later, women started carrying them. They used their paper umbrellas as sun shades. A hat on a stick was even used as an umbrella.

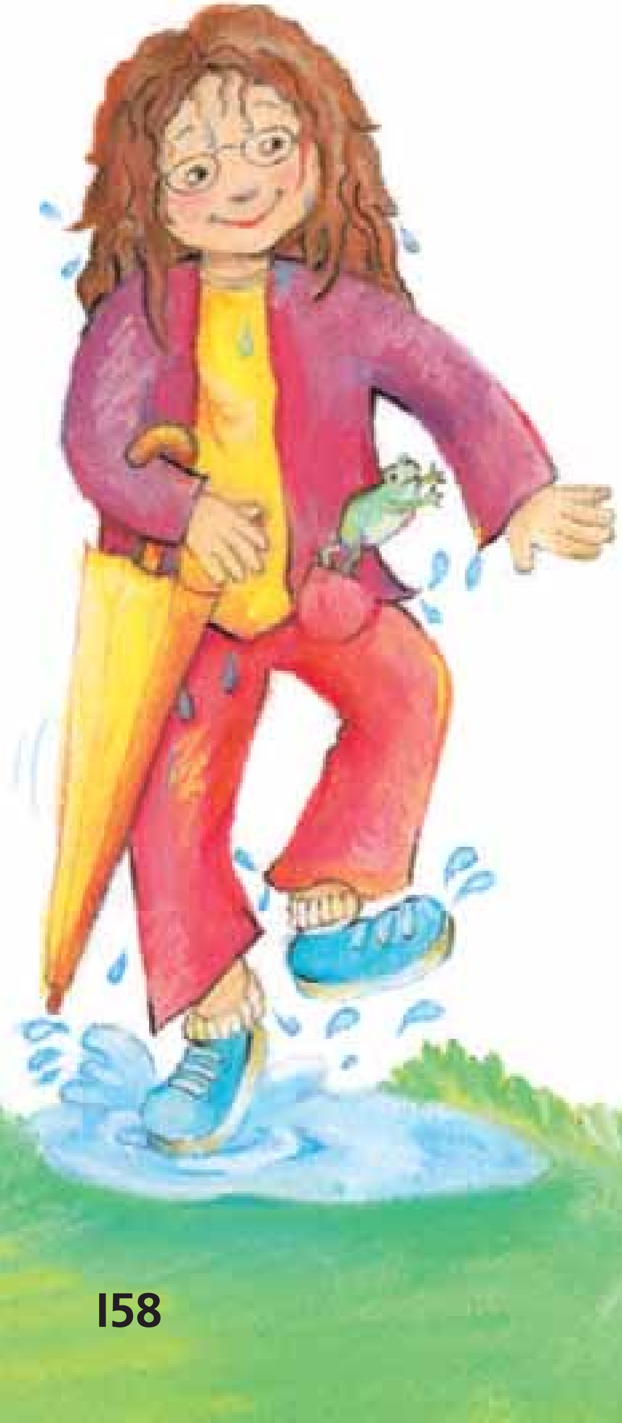
In England, oil was rubbed on paper umbrellas. It made the umbrellas waterproof. Now they could be used in sun or rain.

Umbrellas are now used around the world. They are used by both men and women. Umbrellas keep people dry on rainy days. But they can still shade you on a sunny day—if you want them to!



Bella Had a New Umbrella

by Eve Merriam



Bella had a new umbrella,
Didn't want to lose it,
So when she walked out in the rain
She didn't ever use it.
Her nose went sniff,
Her shoes went squish,
Her socks got soggy,
Her glasses got foggy,
Her pockets filled with water
And a little green froggy.
All she could speak was a weak kachoo!
But Bella's umbrella
Stayed nice and new.

Go on

Tip

Connect the clues.

Directions: Answer the questions.

1. **How is Bella's umbrella like a paper umbrella?**
   - **A** Both are used in the rain.
   - **B** Both are never used in the rain.
   - **C** Both are made of paper.
   - **D** Both are used in sunny weather.

2. **What would MOST LIKELY happen if you used a paper umbrella in the rain?**
   - **A** It would tear and fall apart.
   - **B** It would keep you dry.
   - **C** It would shade you from the sun.
   - **D** It would get oily.

3. **What else could Bella do to keep from losing her umbrella?**

Writing Prompt

Write a summary of "The Story of the Umbrella." It should be about five sentences. Write just the main ideas.

STOP

Tip

Connect the clues.

Directions: Answer the questions.

1. How is Bella's umbrella like a paper umbrella?

A Both are used in the rain.
B Both are never used in the rain.
C Both are made of paper.
D Both are used in sunny weather.

2. What would MOST LIKELY happen if you used a paper umbrella in the rain?

A It would tear and fall apart.
B It would keep you dry.
C It would shade you from the sun.
D It would get oily.

3. What else could Bella do to keep from losing her umbrella?

Writing Prompt

Write a summary of "The Story of the Umbrella." It should be about five sentences. Write just the main ideas.

STOP

LIFE IN THE DESERT

Talk About It

What is life like in the desert?

LOG ON Find out more about life in the desert at **www.macmillanmh.com**

Vocabulary

burrow
beyond
warning
lengthy
ranger's
distant

Context Clues

A possessive noun shows ownership. An apostrophe (') and *s* are added to a singular noun to make it possessive.

The *ranger's* map fits in his pocket.

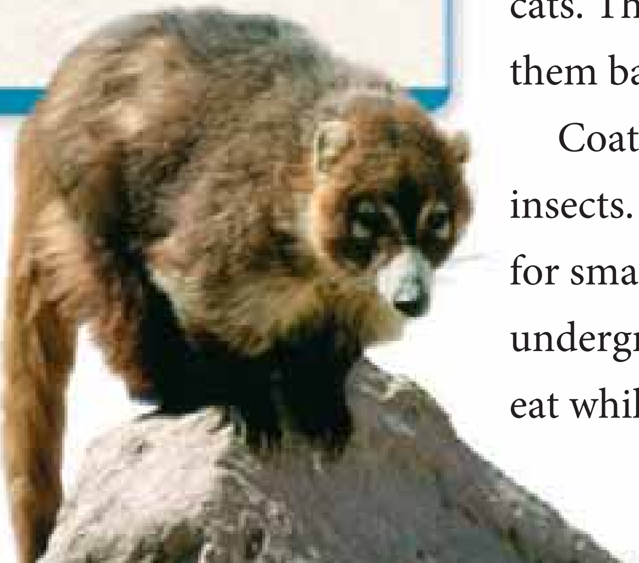
The map belongs to the ranger.

THE COATIS OF THE SONORA DESERT

by Nya Taylor

Coatis (ko-WAH-tees) are animals that live in the desert. They look like raccoons and are about as big as cats. They have long tails that help them balance as they climb.

Coatis like to eat plants and insects. They use their claws to dig for small animals that may be living underground in a **burrow**. Some coatis eat while hanging from trees.



Coatis live together. They do not wander **beyond** their group. Staying close helps them hear **warning** calls if danger is near. Coatis spend hours taking **lengthy** rests in the shade. During the hot days, they need to stay cool. At night, they climb into trees to sleep.

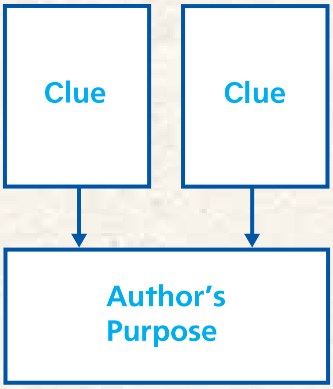
You can see coatis at the Sonora Desert Museum in Arizona. The park has workers to help you. You may ask to use a **ranger's** binoculars to see far away. The binoculars will help you spot coatis in the trees in the **distant** mountains.

Reread for Comprehension

Summarize

Author's Purpose

One way to summarize an article is to explain the author's purpose. Ask yourself about the reasons why the author wrote this information. Reread the selection and use the chart to summarize the author's purpose.



Comprehension

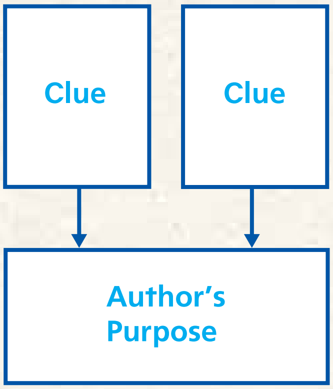
Genre

An **Informational Story** gives facts about a topic.

Summarize

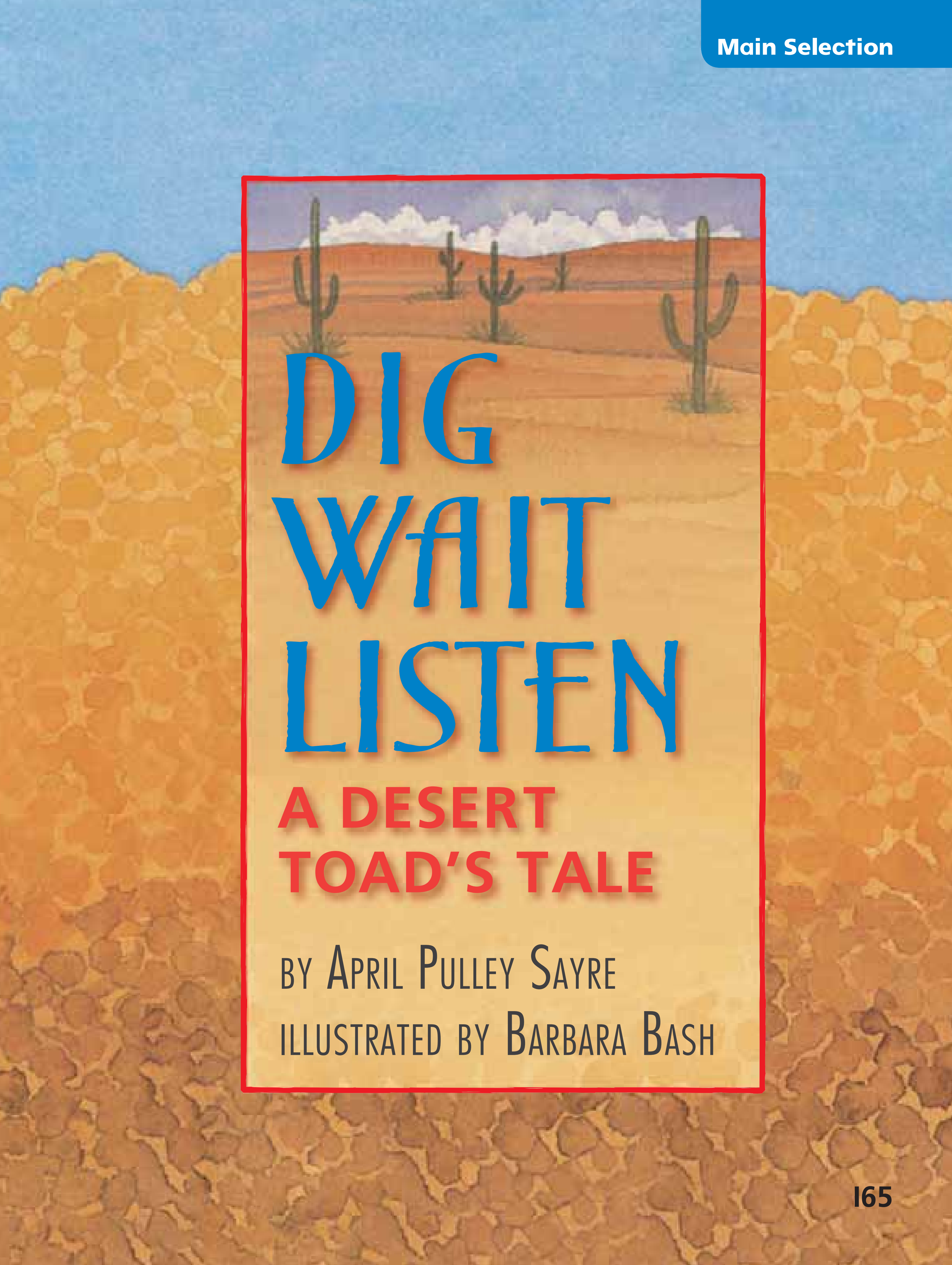
Author's Purpose

As you read, use the Author's Purpose Chart.


Clue
Clue
Author's Purpose

Read to Find Out

What do you learn about the toad?



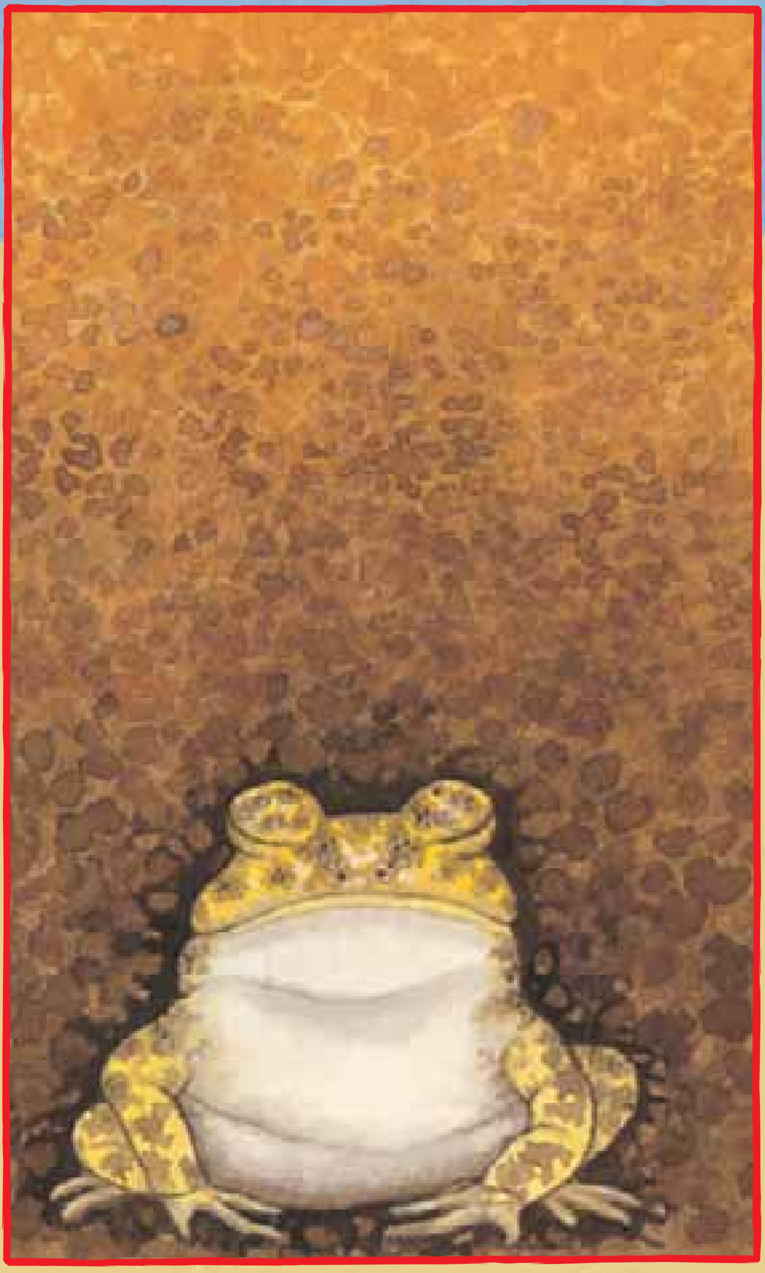
DIG WAIT LISTEN

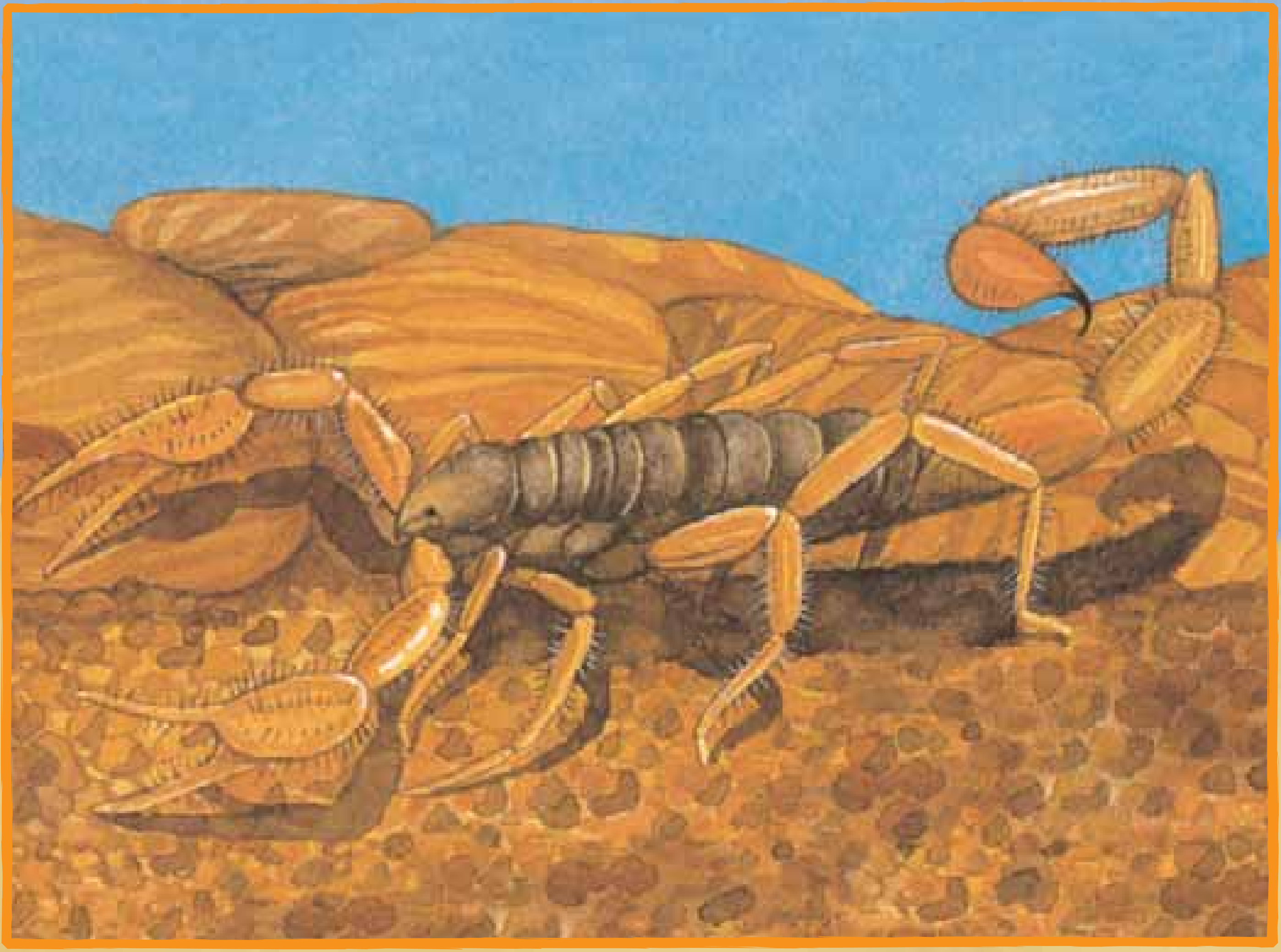
A DESERT TOAD'S TALE

BY APRIL PULLEY SAYRE

ILLUSTRATED BY BARBARA BASH

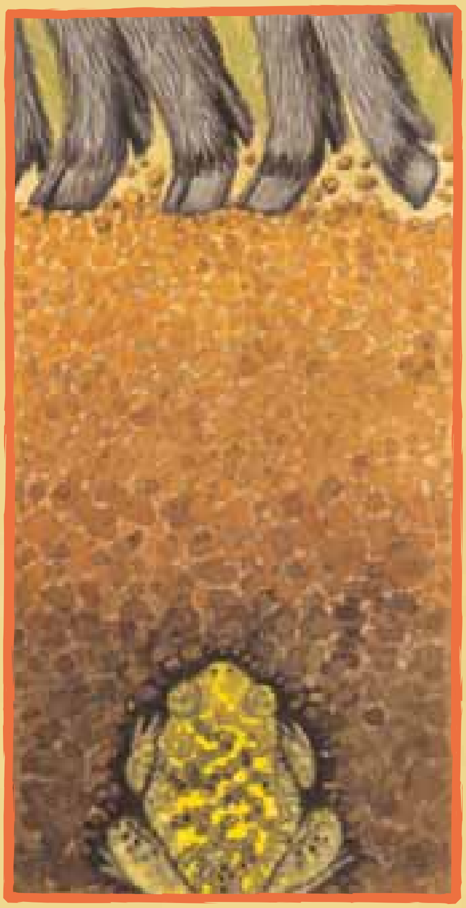
Deep in the desert,
under the sand, the spadefoot
toad waits. She waits…for the
sound of rain.





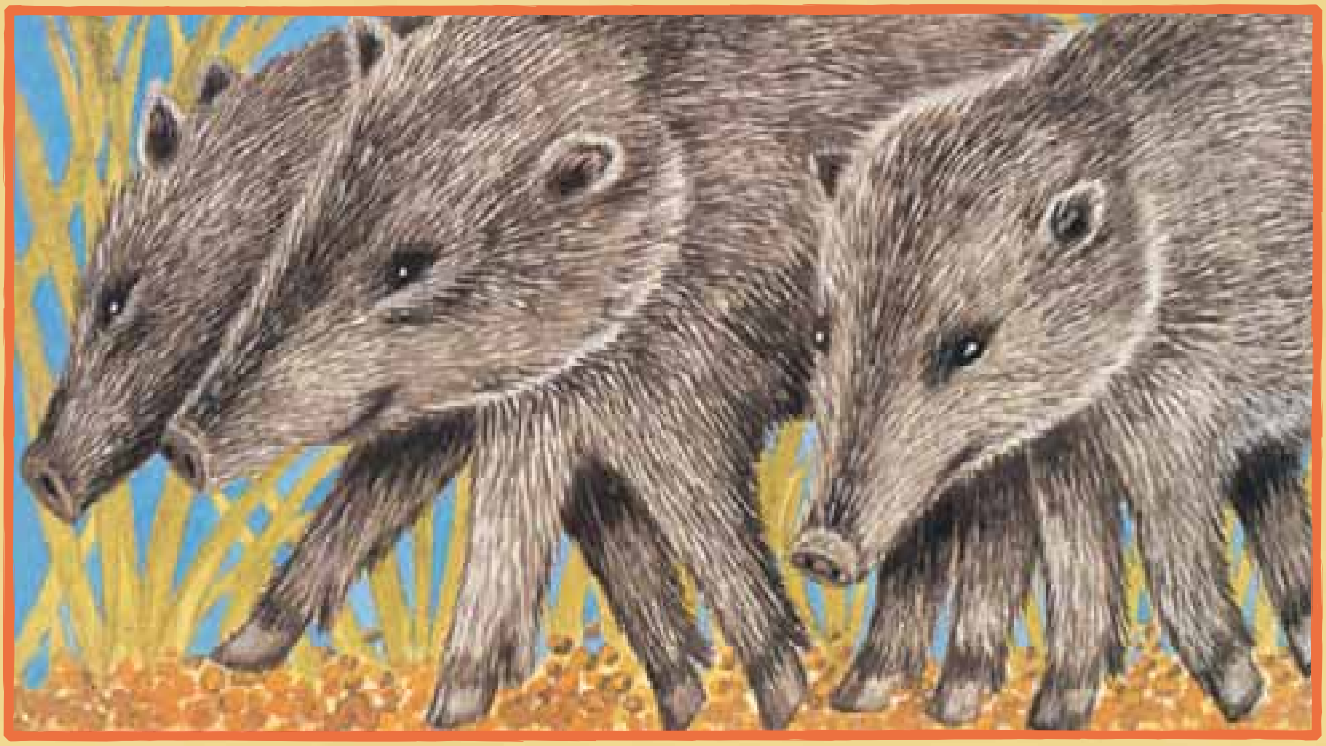
Skitter, skitter, scratch.
She hears soft sounds.
Is this the rain at last?

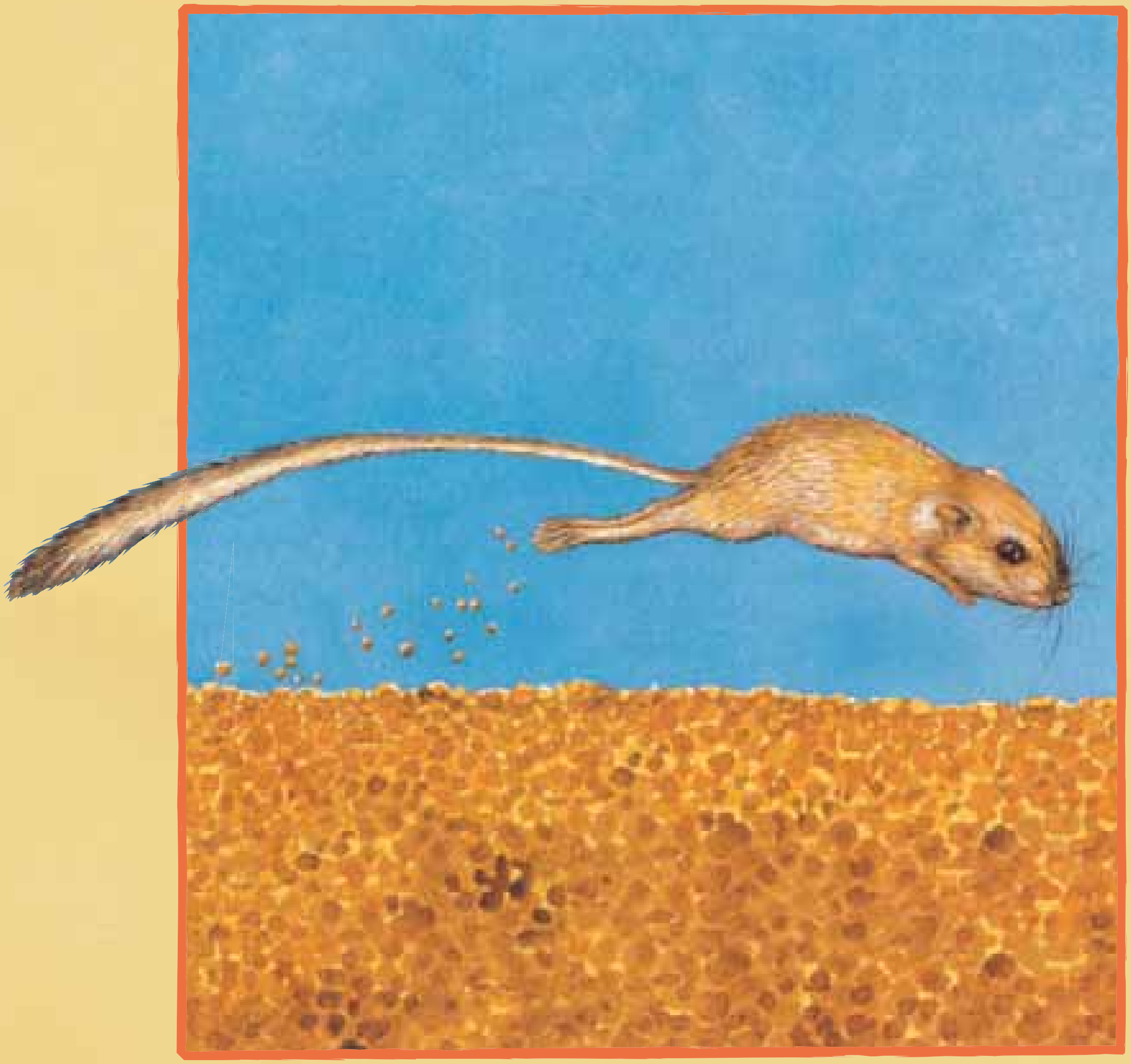
No. It's the scorpion overhead,
crawling slowly past.
Skitter, scratch!



Thunk, thunk, thunk.
Clink, clunk,
clink, clunk.
Sounds shake the soil.

But it's only a herd of peccaries.
Their hooves hammer the ground.

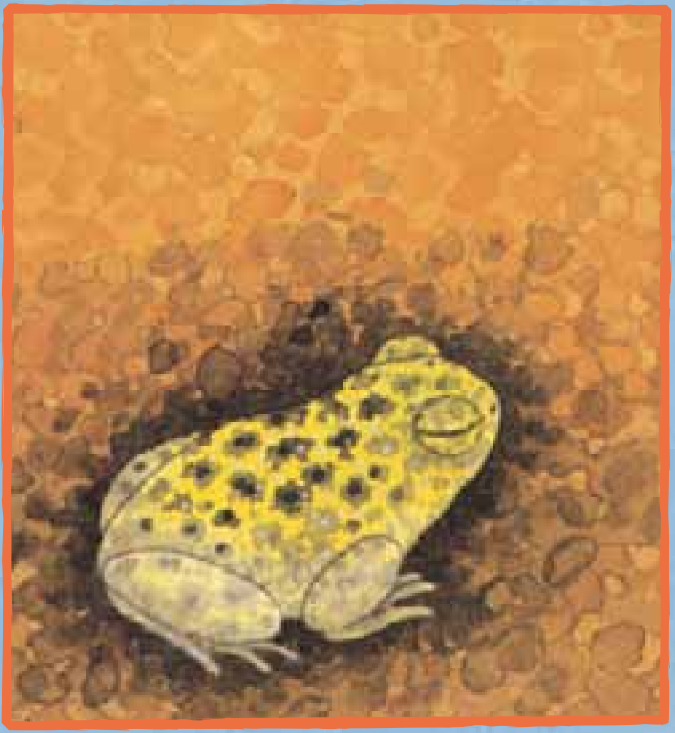




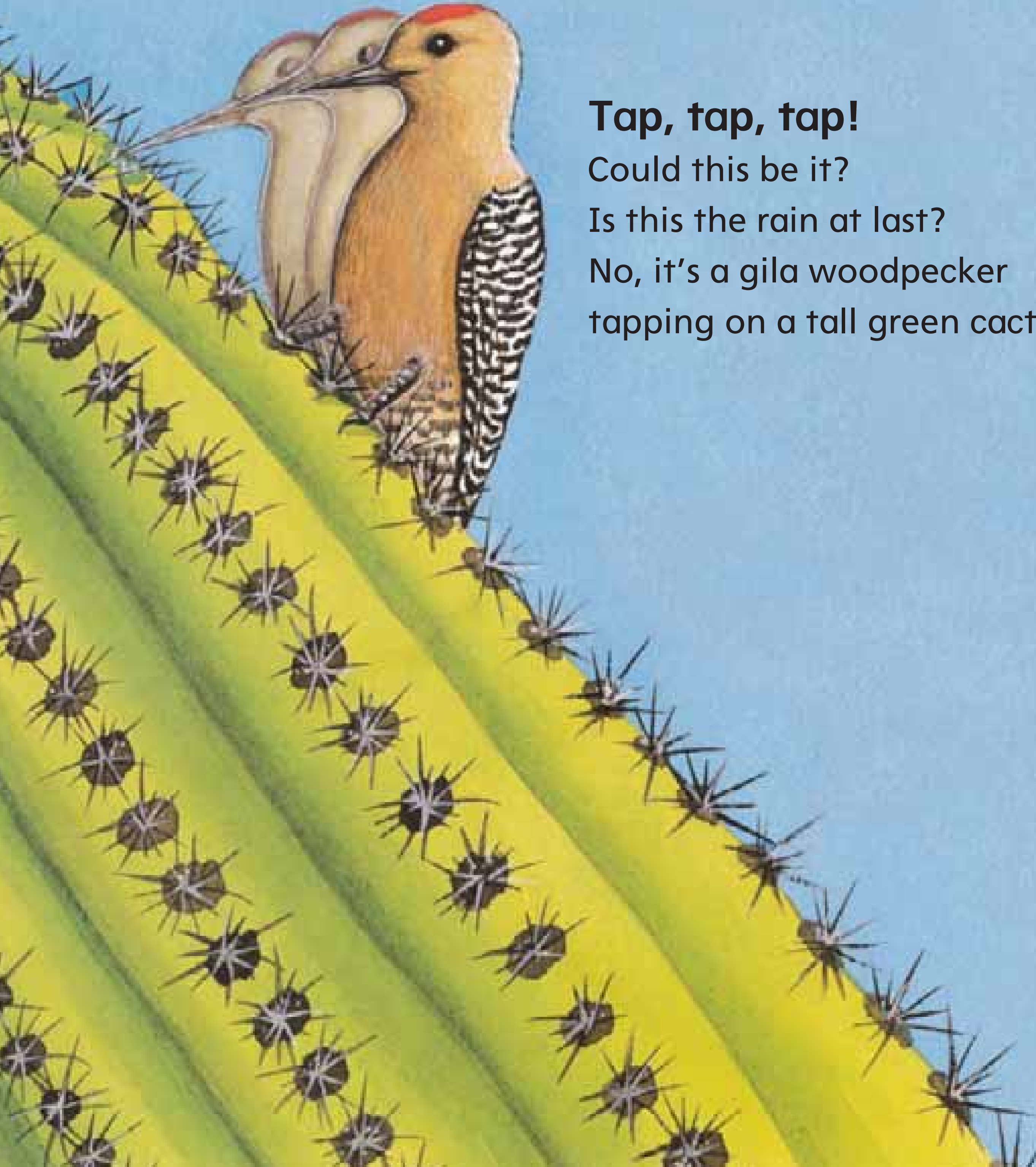
Pop, pop, pop.
What's that sound now?
Is this the rain at last?

No, it's a rat,
hopping in **lengthy** leaps
like a tiny kangaroo.

Will the rain *ever* come?
The desert's so hot, so dry!
And the toad's been waiting
so many months in her
basement **burrow** home.



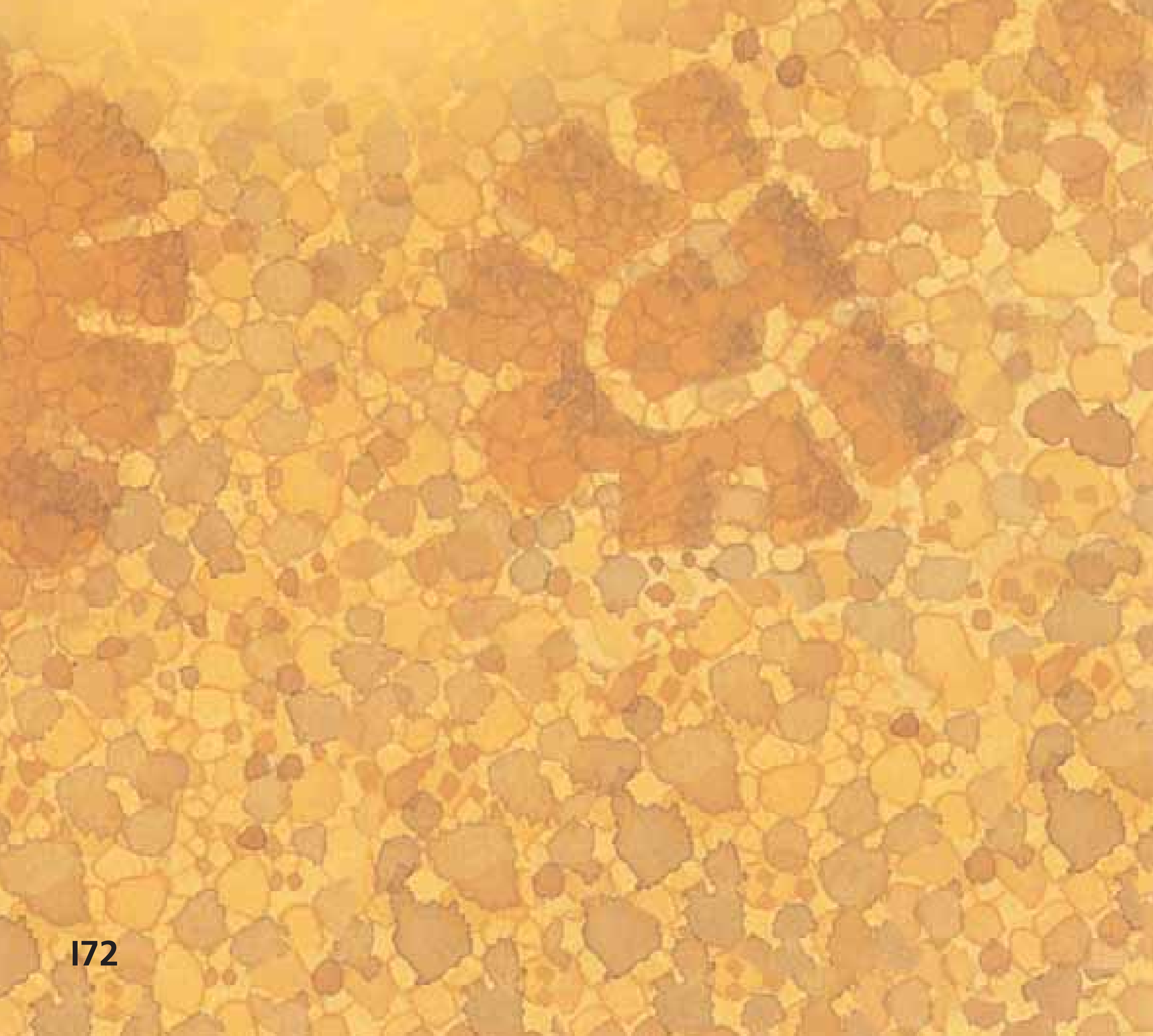
Author's Purpose
Why do you think the author gives so much information about the other desert animals?



Tap, tap, tap!
Could this be it?
Is this the rain at last?
No, it's a gila woodpecker
tapping on a tall green cactus.

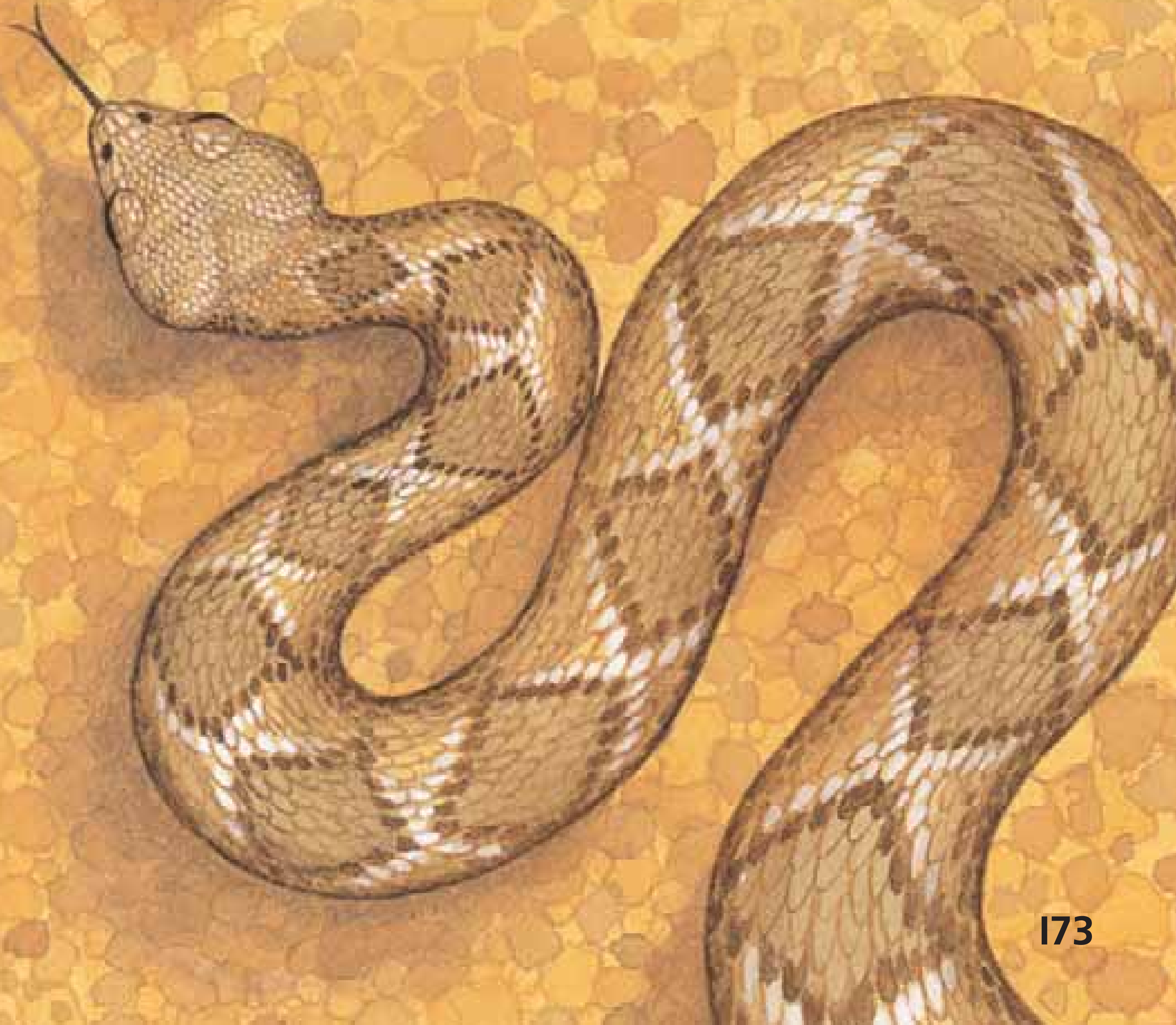
The toad feels the ground begin to shake.
Then a **crunch, crunch, crunch**
that's loud.
Is this the rain?

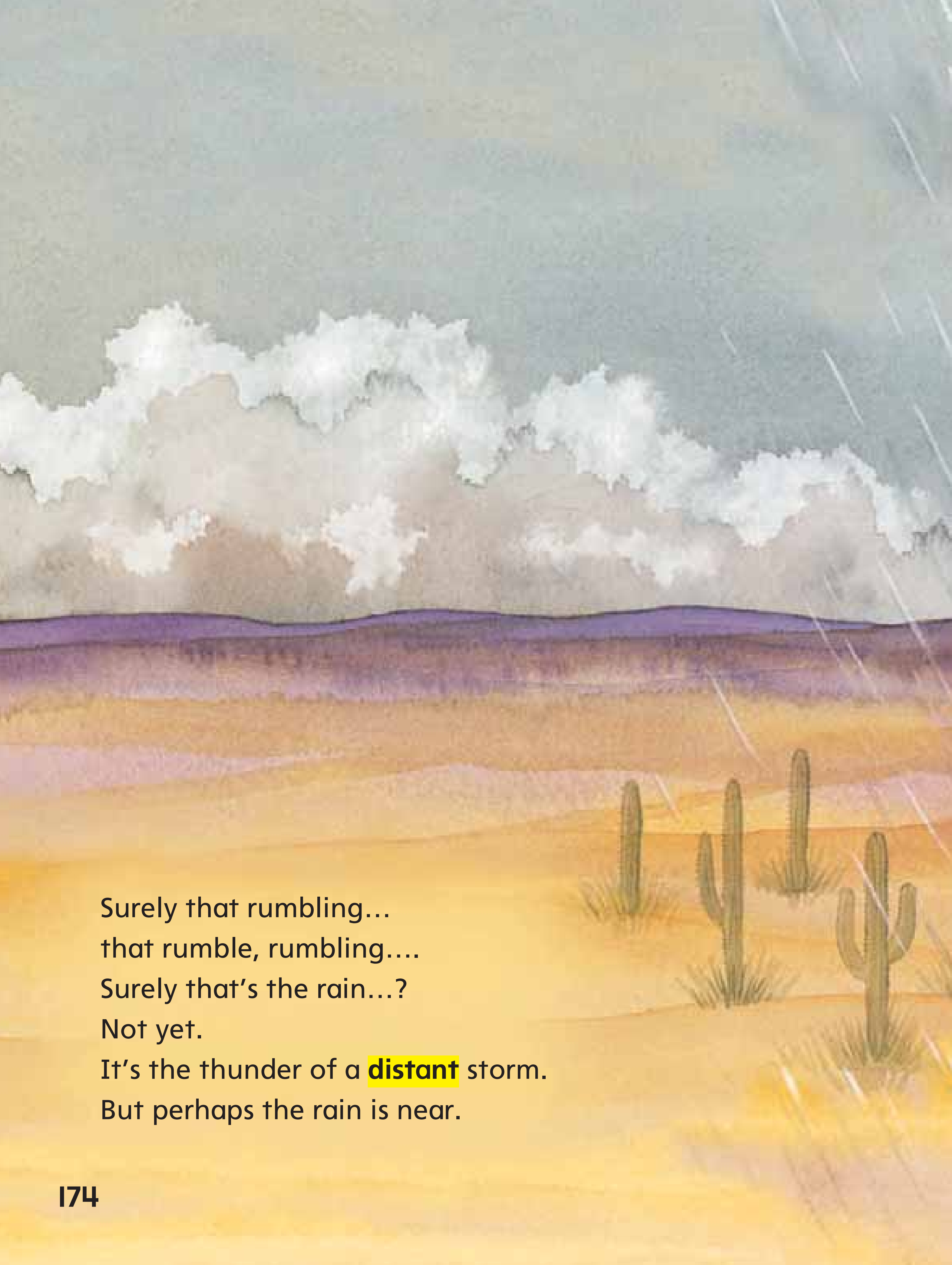
No. It's a park **ranger's** boots
walking on the path.



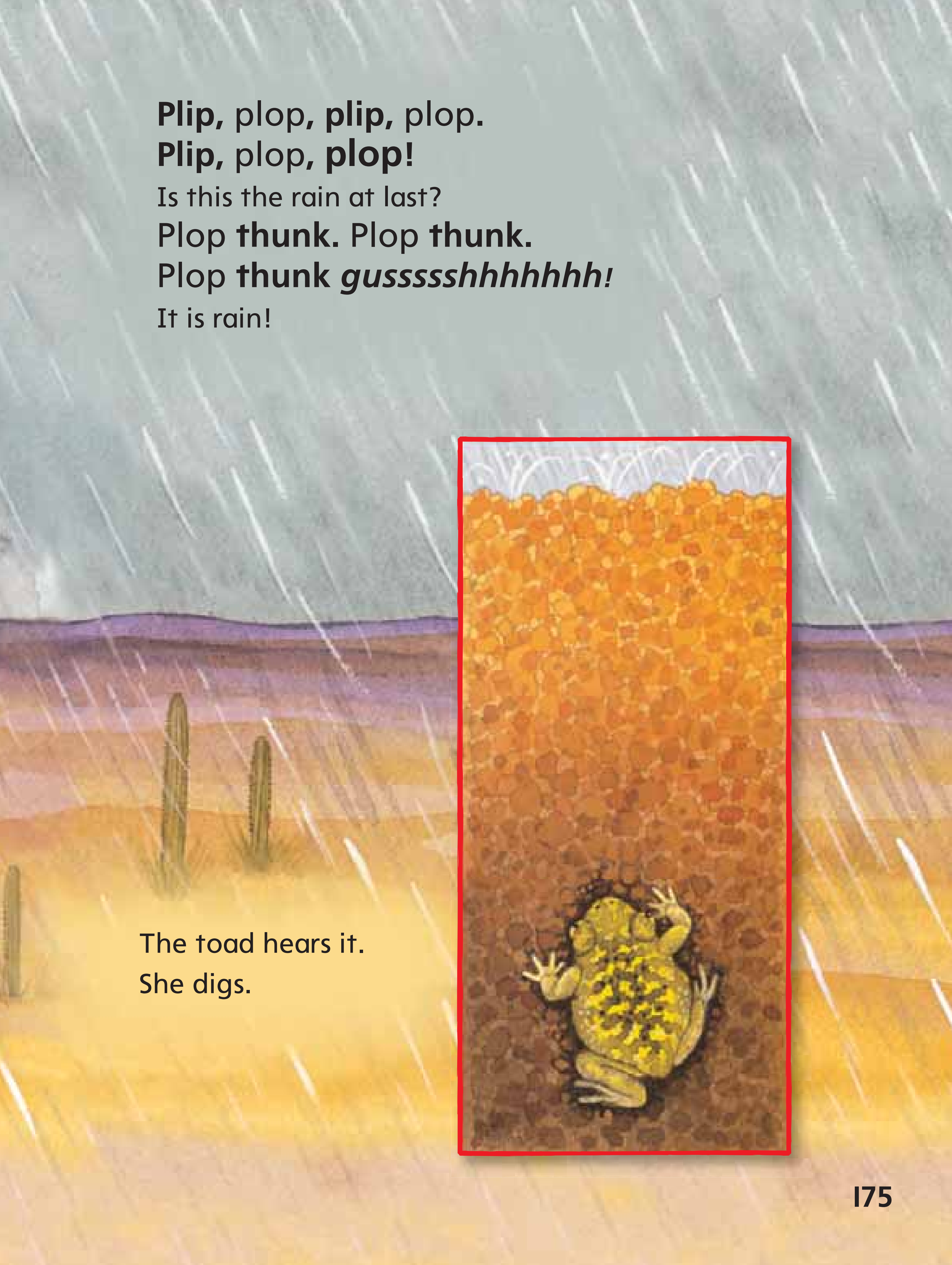
What about that
***tsk, tsk, tsk*?**
Is this the rain at last?

No. It's the rattle of a rattlesnake,
giving warning: **STAY AWAY.**





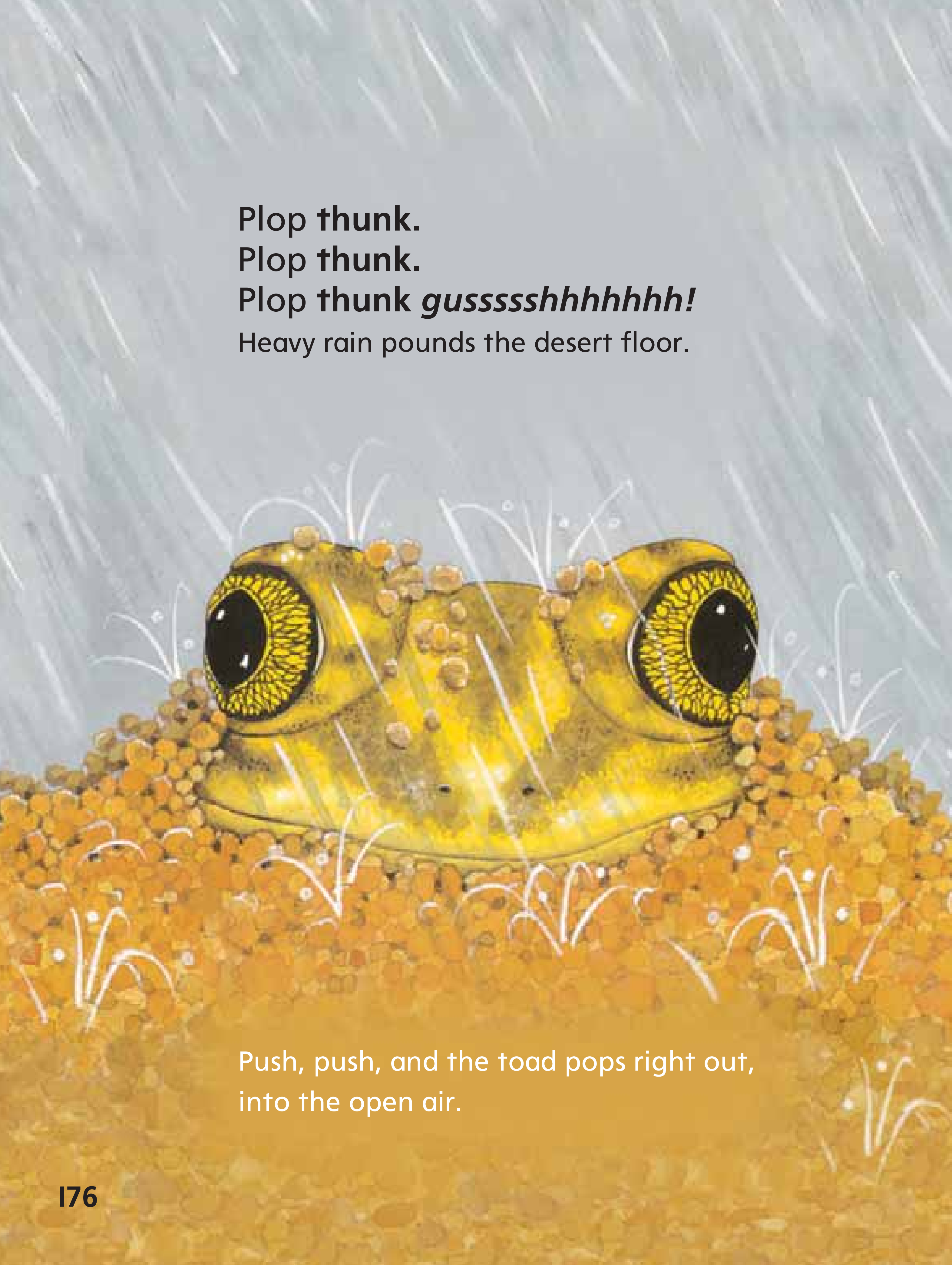
Surely that rumbling…
that rumble, rumbling….
Surely that's the rain…?
Not yet.
It's the thunder of a **distant** storm.
But perhaps the rain is near.



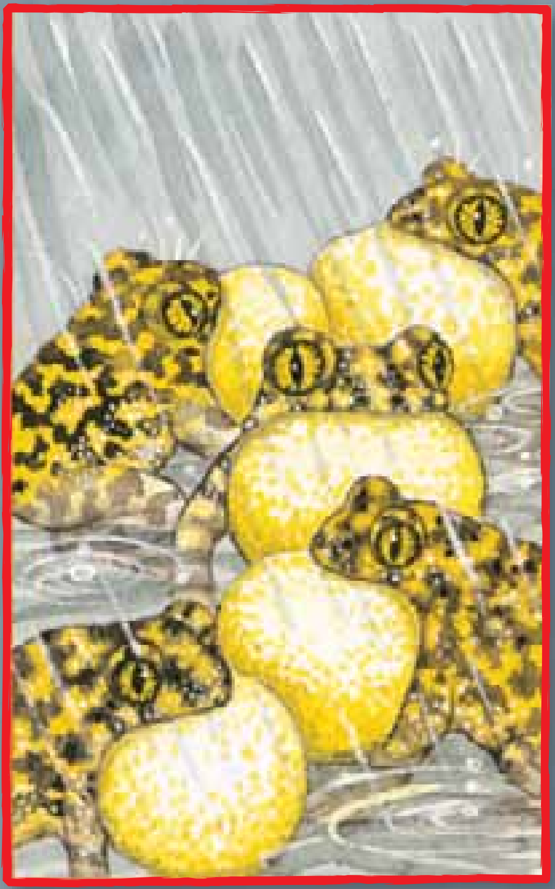
Plip, plop, **plip,** plop.
Plip, plop, **plop!**
Is this the rain at last?
Plop **thunk.** Plop **thunk.**
Plop **thunk** ***gussssshhhhhhh!***
It is rain!

The toad hears it.
She digs.

Plop **thunk.**
Plop **thunk.**
Plop **thunk** ***gussssshhhhhhh!***
Heavy rain pounds the desert floor.



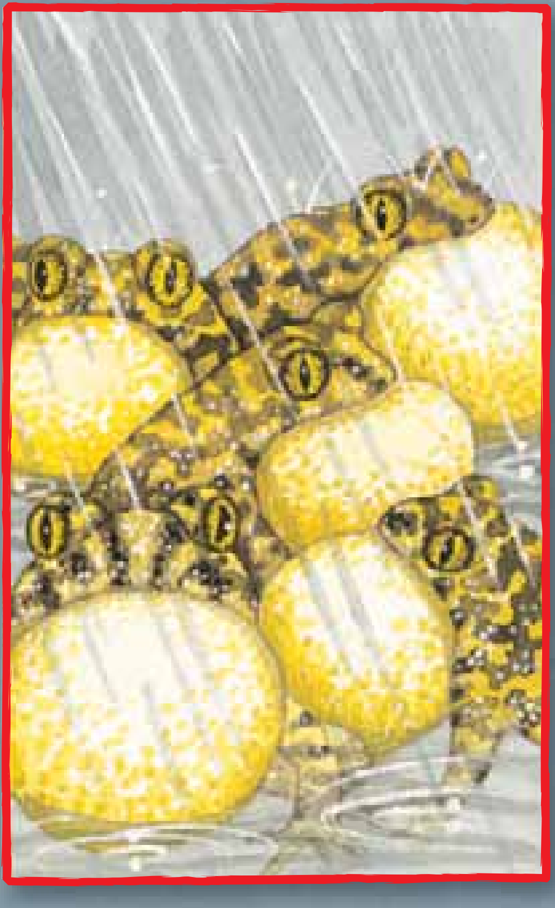
Push, push, and the toad pops right out,
into the open air.



Bleat, bleat, bleat!

The toad hears loud bleats.
Is that the rain sound too?

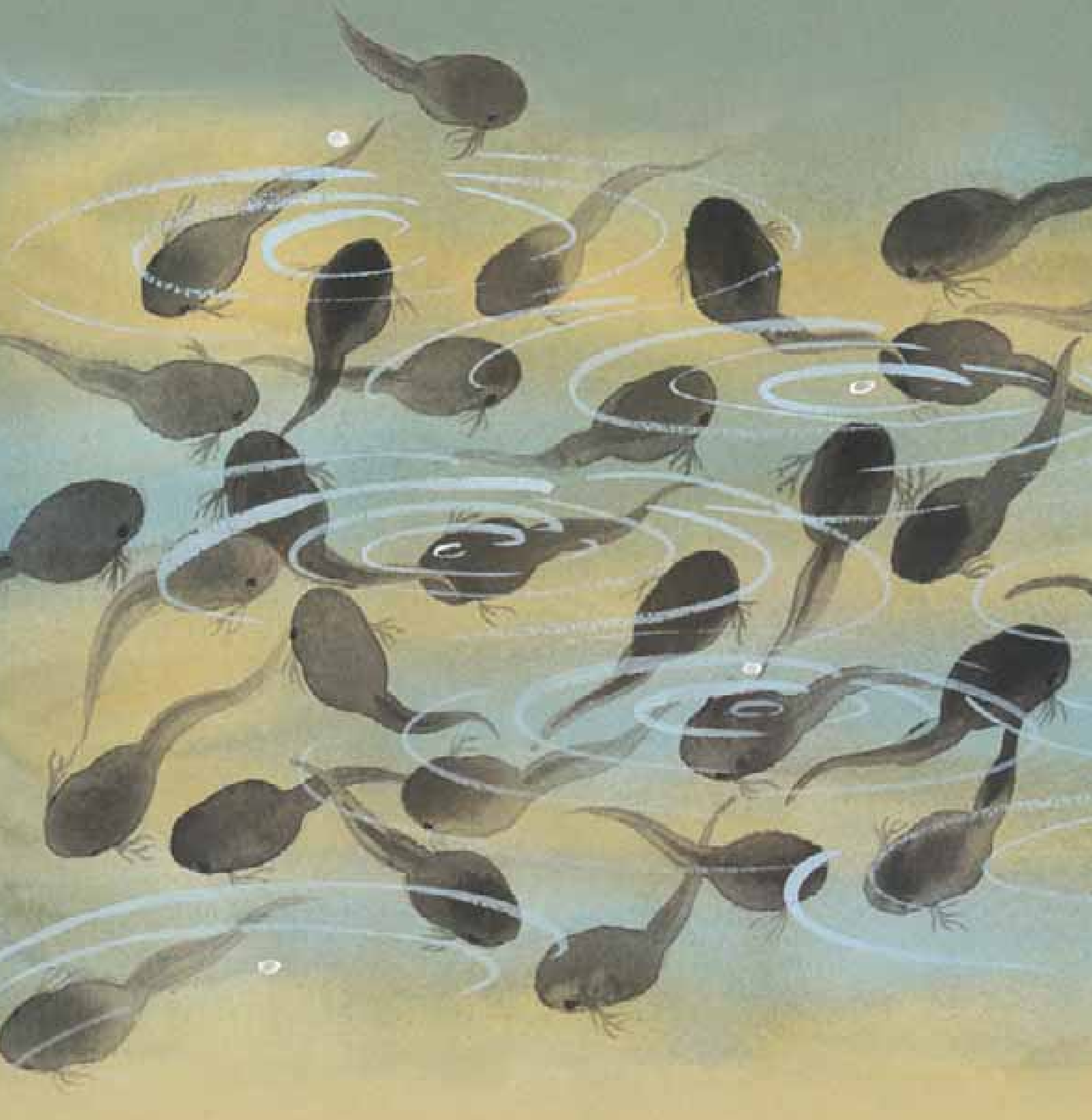
No. It's male spadefoot toads,
calling: Here, come here!



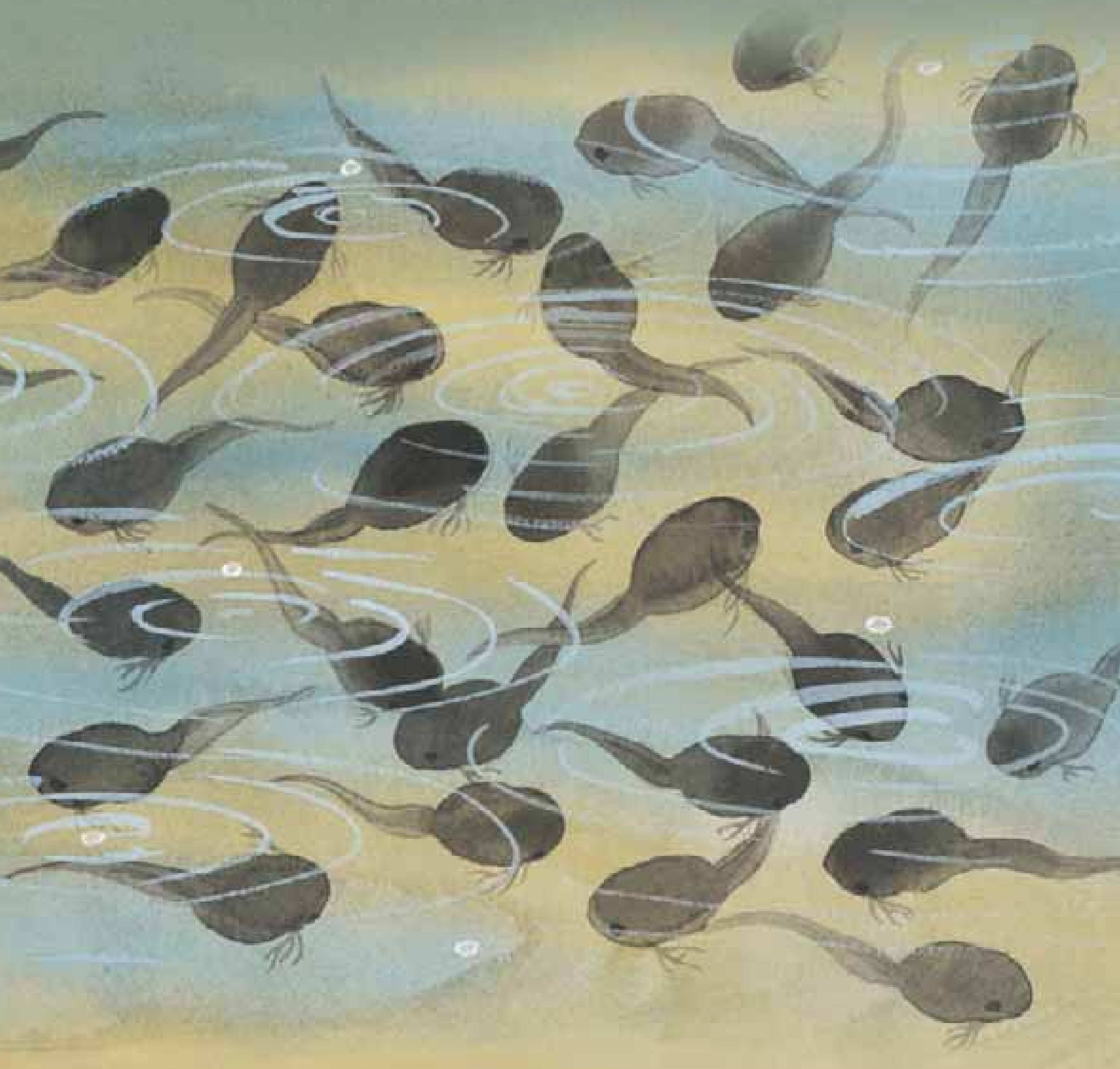
Plop **thunk.** Plop **thunk.**
Plop **thunk**
gussssshhhhhhh!

The toad hops in a puddle.
She lays her eggs,
like beads of glass.

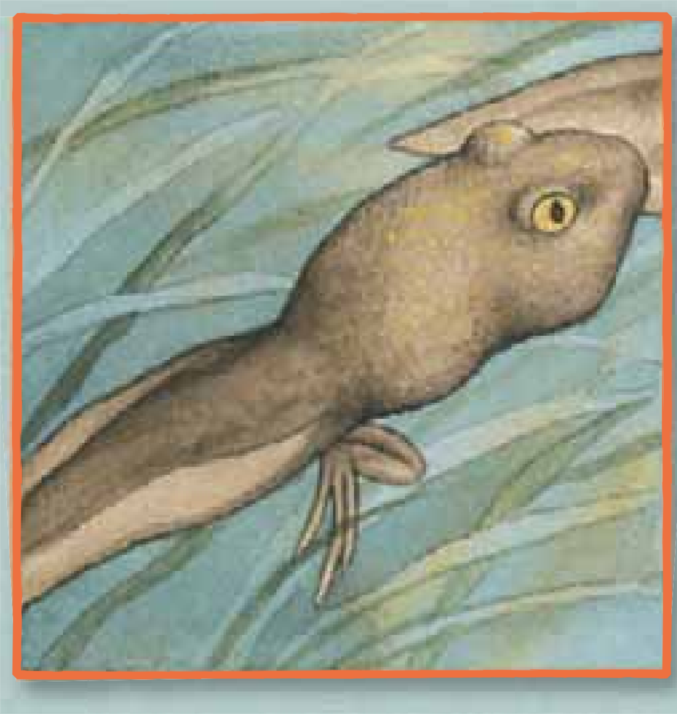
Plop **thunk,** plop **thunk,** plop **thunk**
gussssshhhhhhh!

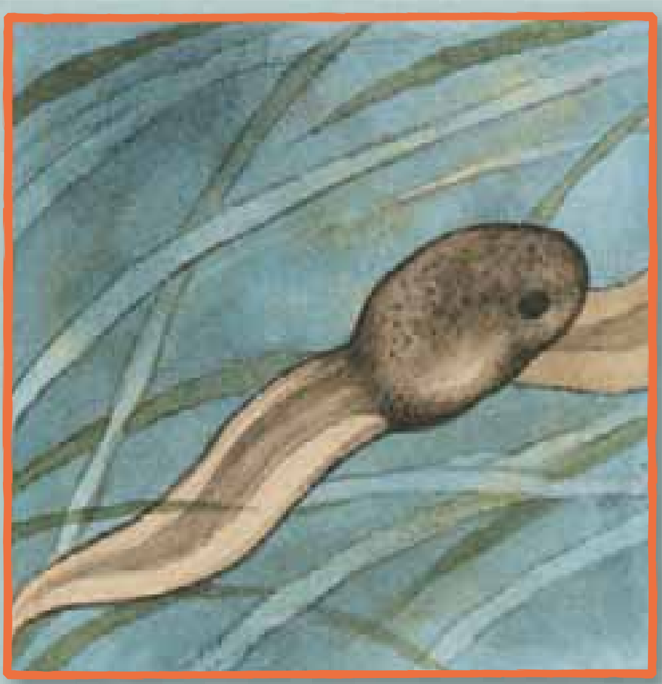


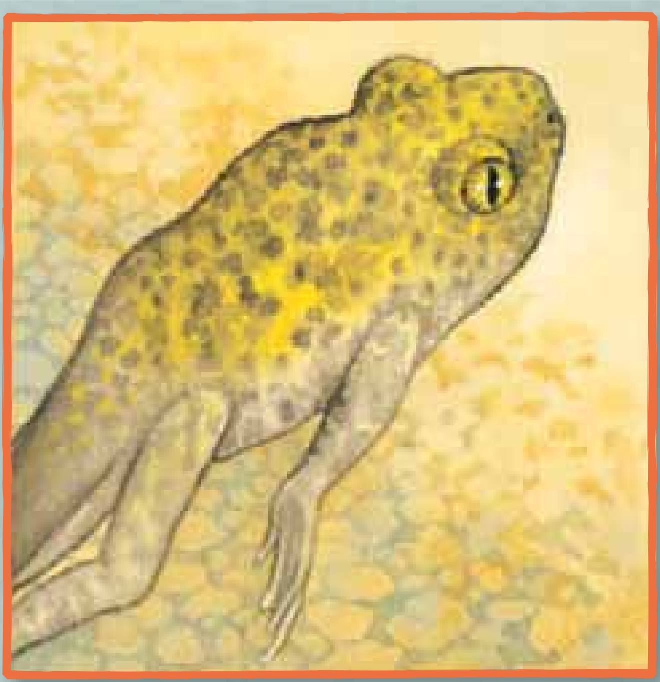
Two days later, the eggs hatch. Wriggling and wiggling in their puddle home, the tadpoles are here at last!

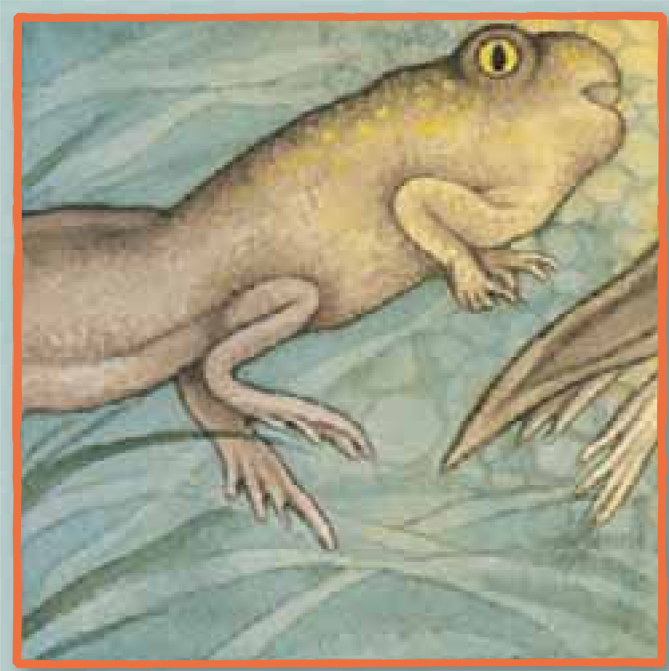


They eat.
They grow.
Legs start to show.
But their puddle is drying up!
Will any make it?







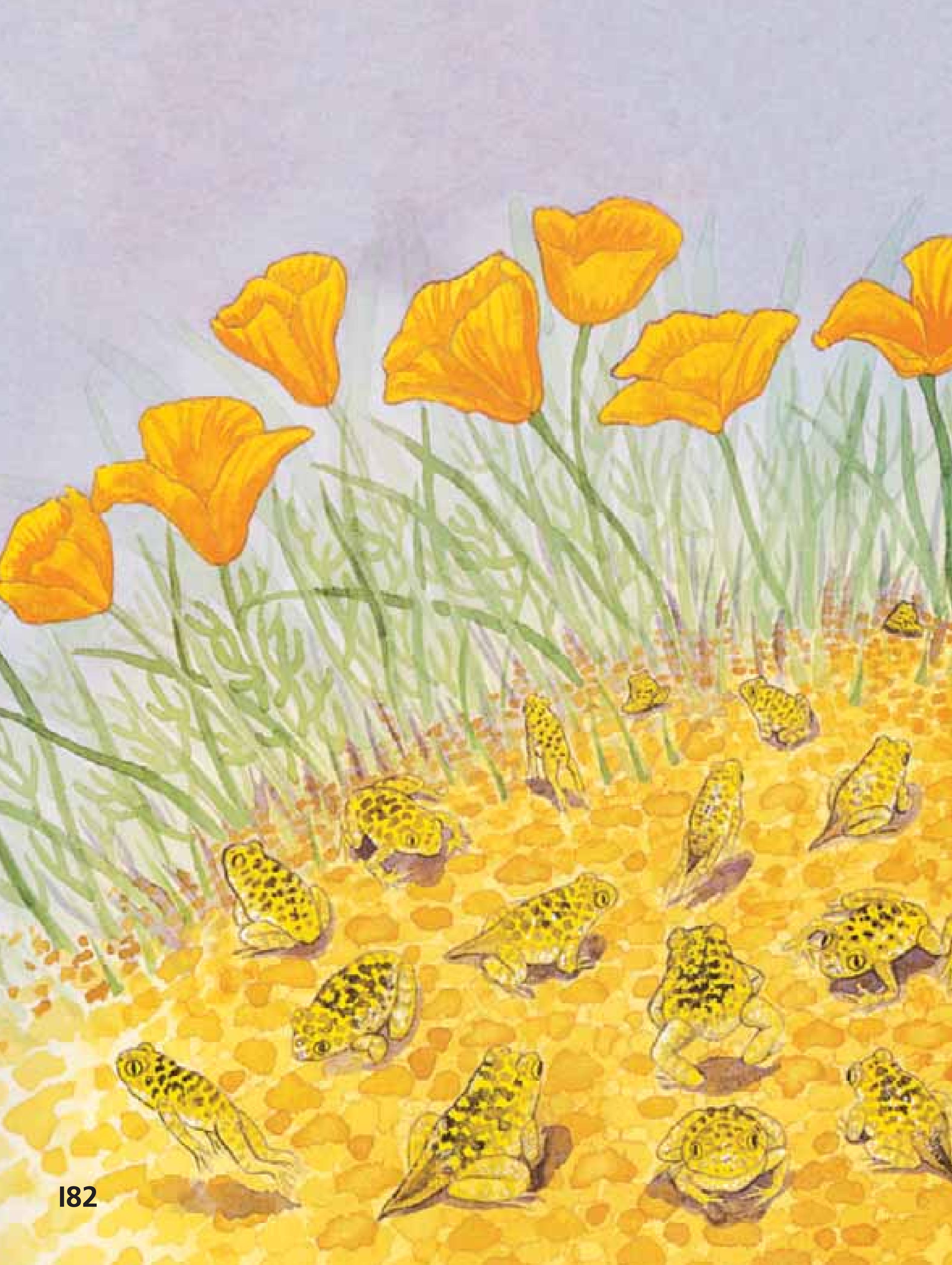


Yes!
With new legs formed,
young toads crawl
from their puddle home.
They rest, then

LEAP

into the desert **beyond**.

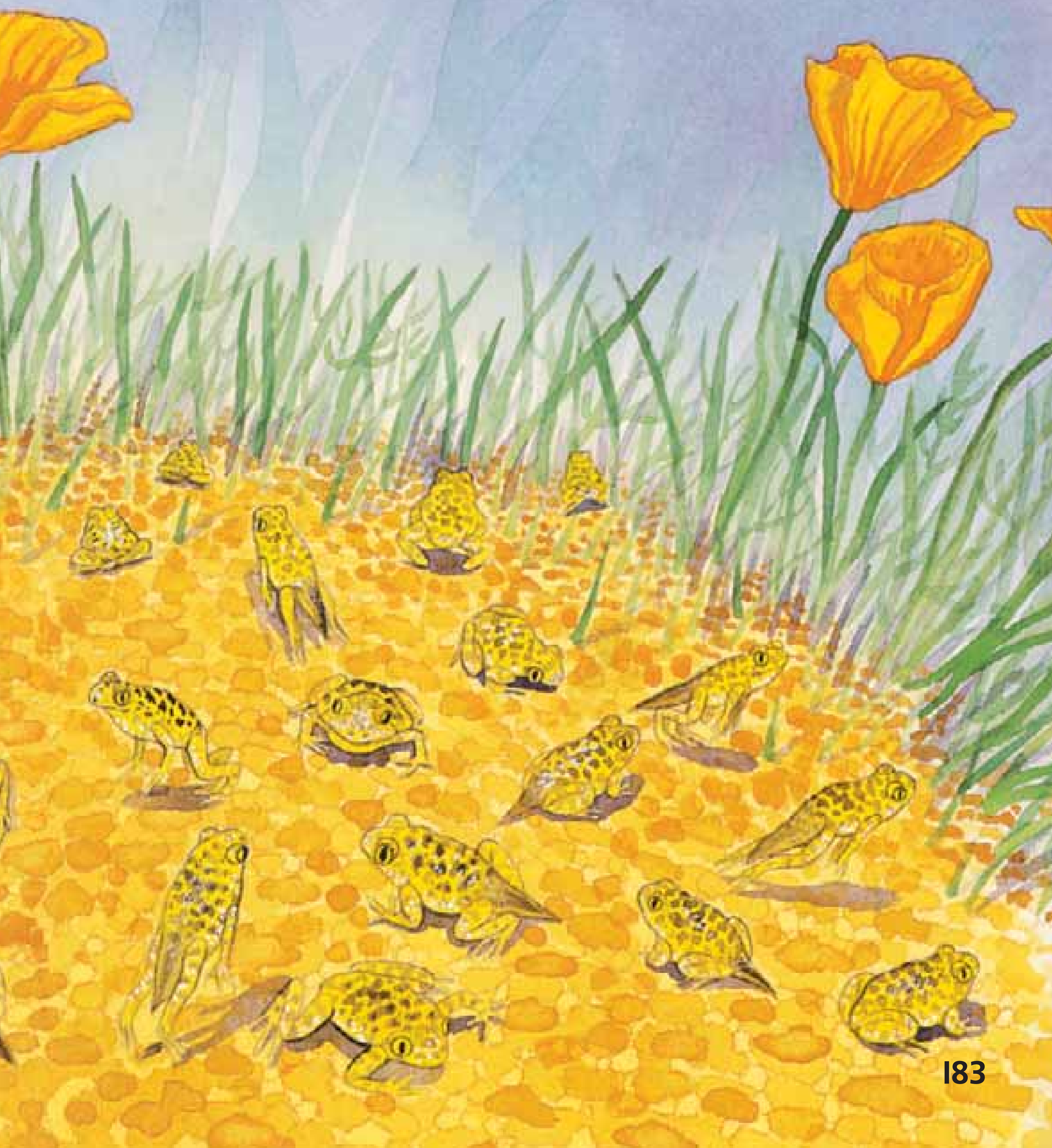
Author's Purpose
Why do you think the author wrote this book? Explain.

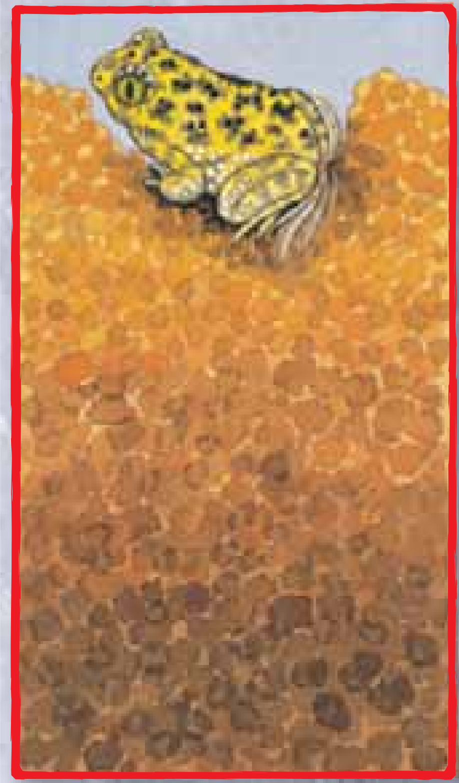


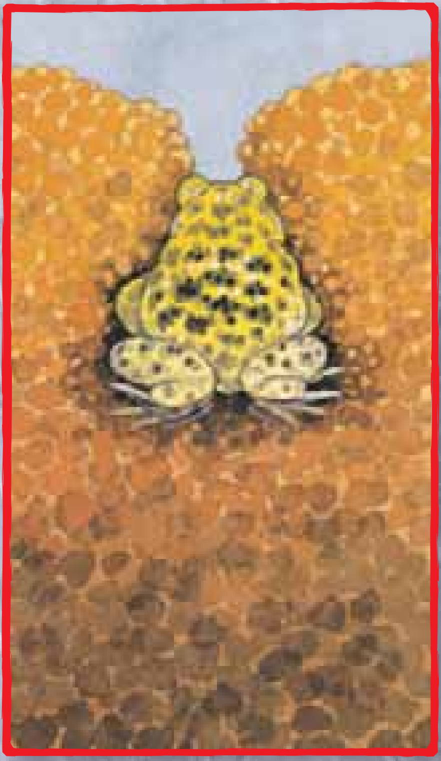
Thump, thump, thump.

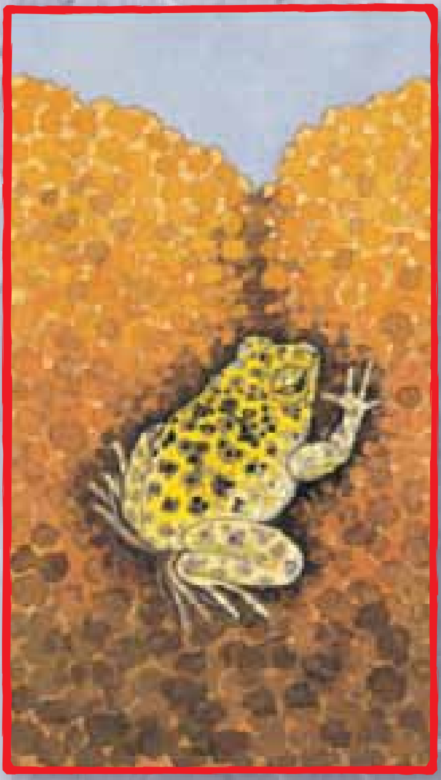
Hundreds of tiny toads jump.

The rain has made the desert green.









Yet it won't be long till the desert's dry,
and toads dig down deep with their
spadefoot feet, to wait for that sound…
that marvelous sound,
the sound of the desert rain.

Plop **thunk,** plop **thunk,**

plop **thunk** ***gussssssshhhhhhh!***

Plop **thunk,** plop **thunk,**

plop **thunk** ***gussssssshhhhhhh!***

Plop **thunk,** plop **thunk,**

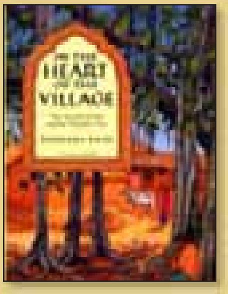
plop **thunk** ***gussssssshhhhhhh!***

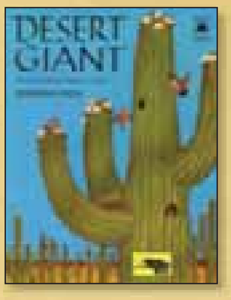
ENJOY THE OUTDOORS WITH APRIL AND BARBARA

"I love writing—most of the time," says author **April Pulley Sayre**. "Sometimes my first try is horrible. But I rewrite until I like every paragraph. I try to communicate the excitement I feel about nature."

A love of nature also drives artist **Barbara Bash**. When she does research, she uses books and photos to get to know the topic. Next, Barbara visits the places in the stories. "Then," she says, "something alive and personal can be expressed through my books."

Other books written and illustrated by Barbara Bash





LOG ON Find out more about April Pulley Sayre and Barbara Bash at **www.macmillanmh.com**

Author's Purpose

April Pulley Sayre wanted to inform readers about the toad's life cycle—all the parts of the toad's life. Write about the life cycle of an animal you know.

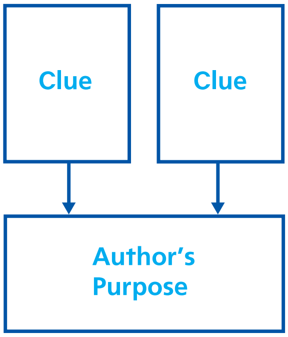
Comprehension Check

Retell the Story

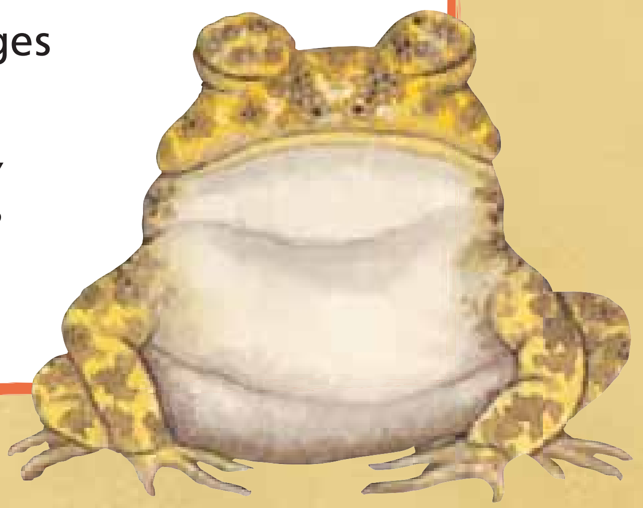
Use the Retelling Cards to retell the selection.

Retelling Cards

Think and Compare



1. What is the main message of this selection? **Summarize: Author's Purpose**
2. Reread pages 167–169. Why did the spadefoot toad think the noise she heard was rain? What was the noise? **Analyze**
3. Do you think it might be difficult for some animals to live in the desert? Explain why or why not. **Analyze**
4. How is a spadefoot toad's **burrow** like other animal homes? **Analyze**
5. How are the coatis in "The Coatis of the Sonoran Desert," on pages 162–163, different from the spadefoot toad in *Dig, Wait, Listen?* How are the animals similar? **Reading/Writing Across Texts**



Comprehension Check

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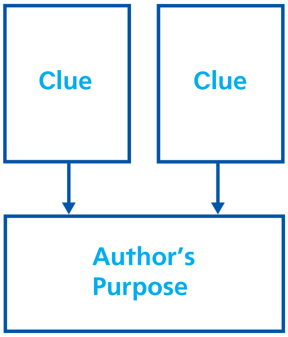
Retelling Cards

Think and Compare



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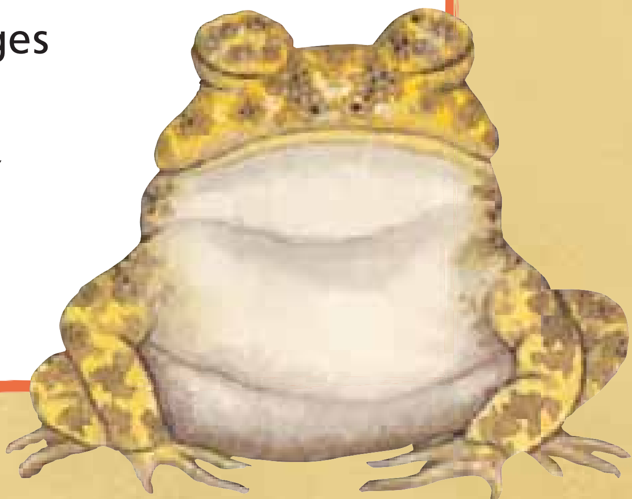


Science

Genre

Nonfiction

Encyclopedia articles give information and facts about a topic.

Text Feature

Charts show information in an organized way. The facts appear in rows and columns.

Content Vocabulary

temperature

adapted

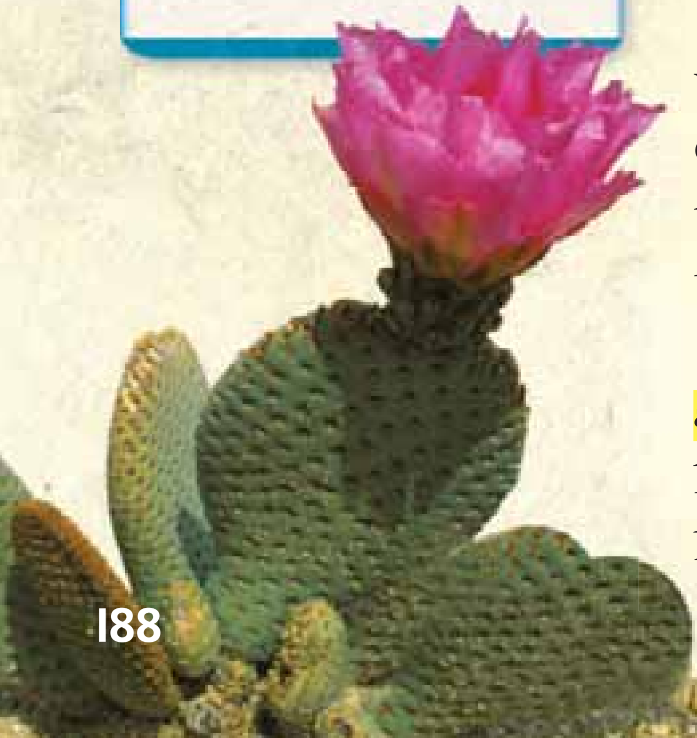
nocturnal

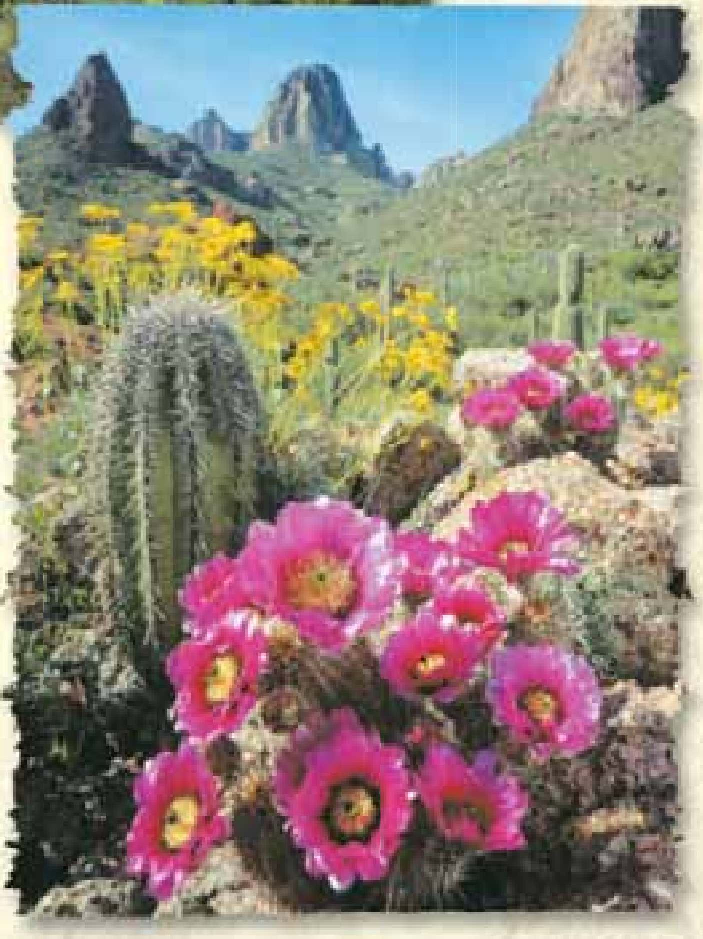
The Sonoran Desert

The Sonoran Desert is a dry area in the American Southwest. It covers about 100,000 square miles in parts of California, Arizona, and Mexico. Some parts of the Sonoran Desert may not have rain for one or two years. Other parts have sudden summer rainstorms.

Summer in the Sonoran Desert is very, very hot. The **temperature** is often more than 100 degrees during the day. Even in the winter, the temperature is usually above freezing.

Desert plants and animals have **adapted** to life in the desert. They have special ways to survive with very little water and in very hot weather.





Plants

The Sonoran Desert has many different kinds of cactus plants. Cactus plants can live a long time without rain.

Cactus plants store water in their thick stems. They also have thick, waxy leaves that help keep in water. Cactus roots grow close to the top of the ground. When it does rain, the roots can soak up the water very quickly.

Sonoran Desert Animals

Name	**Type of Animal**	**What It Eats**
black-chinned hummingbird	bird	flowers, nectar, nuts
coyote	mammal	small animals, insects, plants
ground snake	reptile	insects
horned toad	reptile	plants, insects
roadrunner	bird	insects, lizards, snakes
Sonoran Desert toad	amphibian	insects, mice

The animal name is in the first column.

Information about the animal is in the row.

Animals

Like desert plants, desert animals can live without much rain. Most desert animals do not have to drink water. They get the water they need from their food.

Many desert animals are **nocturnal**. This means they only come out to find food at night, when it is cool. During the hot days, these animals hide in the shade or underground. Staying cool helps animals keep water in their bodies.

Connect and Compare

1. Which desert animals eat insects? Which desert animals only eat plants? **Chart**
2. Think about this encyclopedia article and *Dig, Wait, Listen*. How is the spadefoot toad like the other animals of the Sonoran Desert? **Reading/Writing Across Texts**

Science Activity

Use an encyclopedia to research desert plants. Make a chart that gives two facts for each plant.

LOG ON Find more desert facts at **www.macmillanmh.com**

Write a Dialogue

Writer's Craft

Dialogue

Good writers use lively words in **dialogue** to make their characters sound interesting.

Fox Tells a Joke

by Daniela M.

Fox liked to tell jokes. Tortoise liked Fox, so he put up with Fox's silly jokes.

"Tortoise," said Fox, "why can't it rain for two days without stopping?"

"I don't know," said Tortoise. "Is it because this is the desert?"

"No!" Fox laughed. "It's because there is always a night in between!" She laughed again. "Get it? A night is in between the two days!"

"Ha-ha. Very funny," said Tortoise. Then he pulled his head inside his shell.

I used quotation marks to show dialogue.

I used lively words to tell a joke.

Your Turn

Write your own dialogue. Make up two fictional characters. Then write the characters' words as if they were speaking. Start a new paragraph each time a new character speaks. Then use the Writer's Checklist to check your writing.

Writer's Checklist

- ☐ **Voice:** Did I use lively words in dialogue to make my characters interesting?
- ☑ **Word Choice:** Do the characters' words show what they are like?
- ☑ **Sentence Fluency:** Are my sentences varied? Would they sound interesting if they were read aloud?
- ☑ **Conventions:** Did I use quotation marks correctly?

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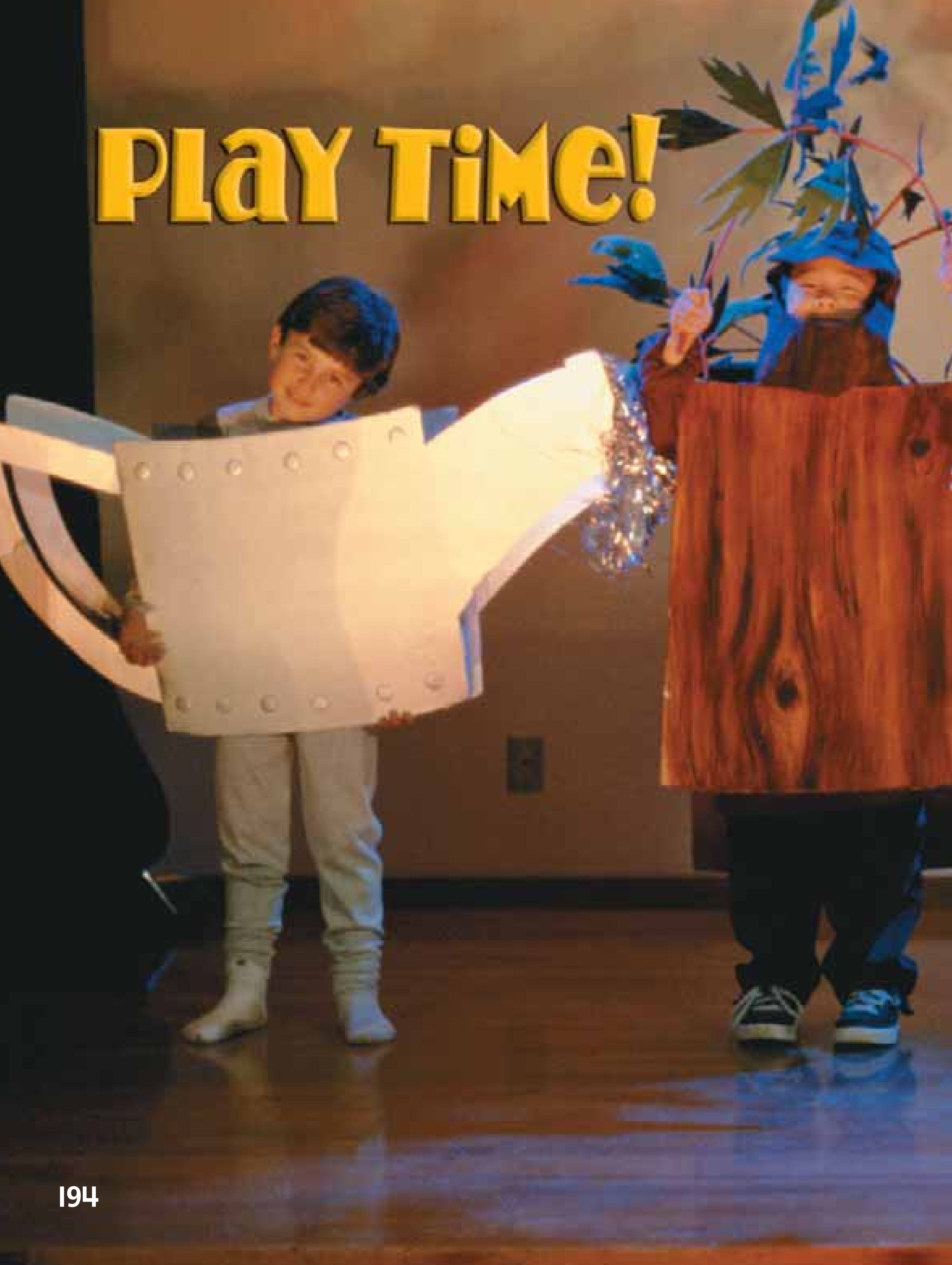
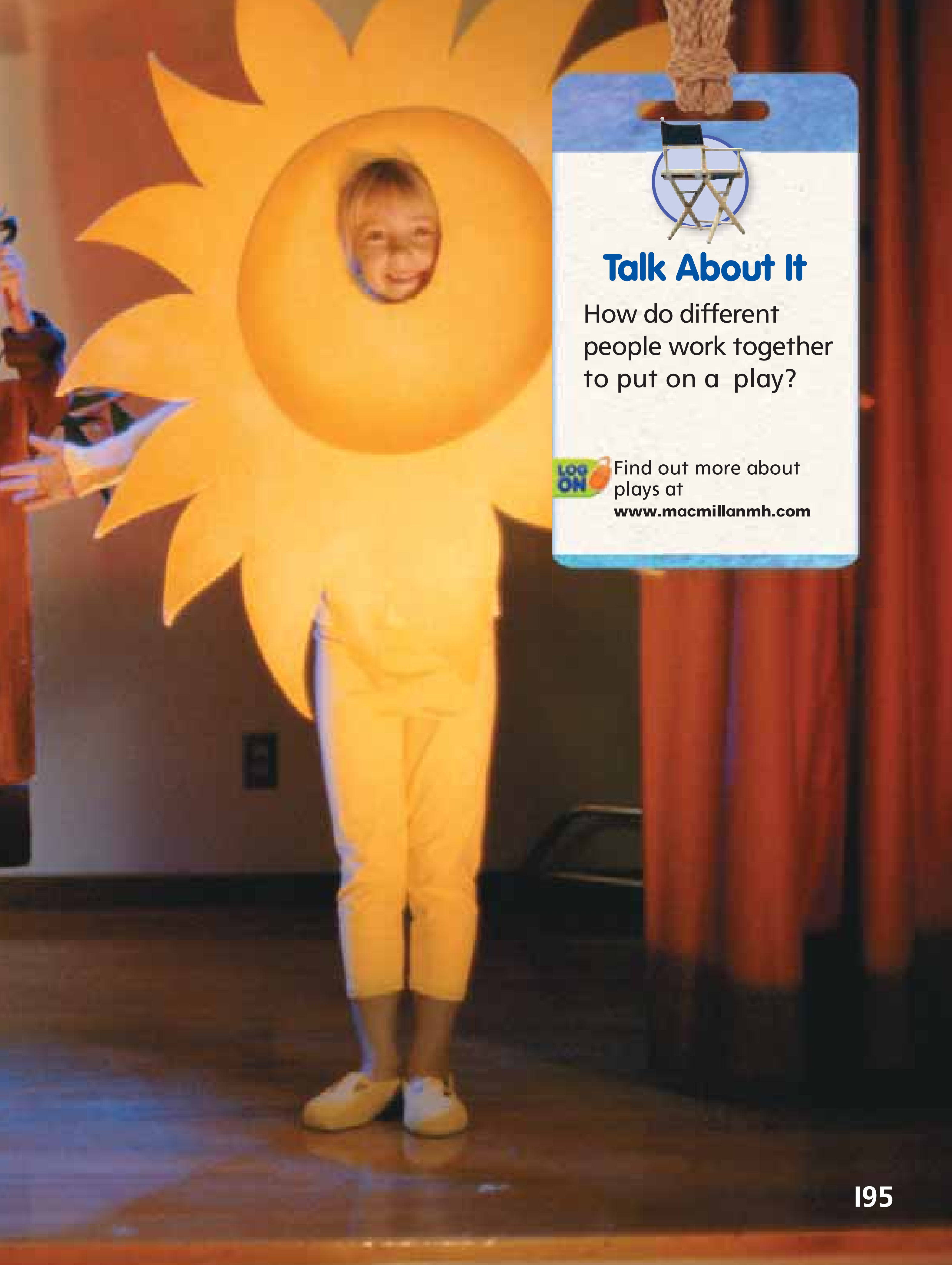
- ☑ **Conventions:** Did I use quotation marks correctly?

PLAY TIME!





Talk About It

How do different people work together to put on a play?

Find out more about plays at
www.macmillanmh.com

Vocabulary

signal
randomly
agreed
gathered
jabbing

Word Parts

An ending at the end of a base word can tell you when an event took place.

The ending *–ed* means that the event happened in the past.

gather + *ed* = *gathered*

WHY SUN AND MOON LIVE IN THE SKY

Characters

Narrator
Sun
Moon
Water

Scene One: Sun and Moon's house

Narrator: Long ago Sun and Moon lived on Earth.

Moon: Sun, I see a **signal** in the sky. It is a sign.

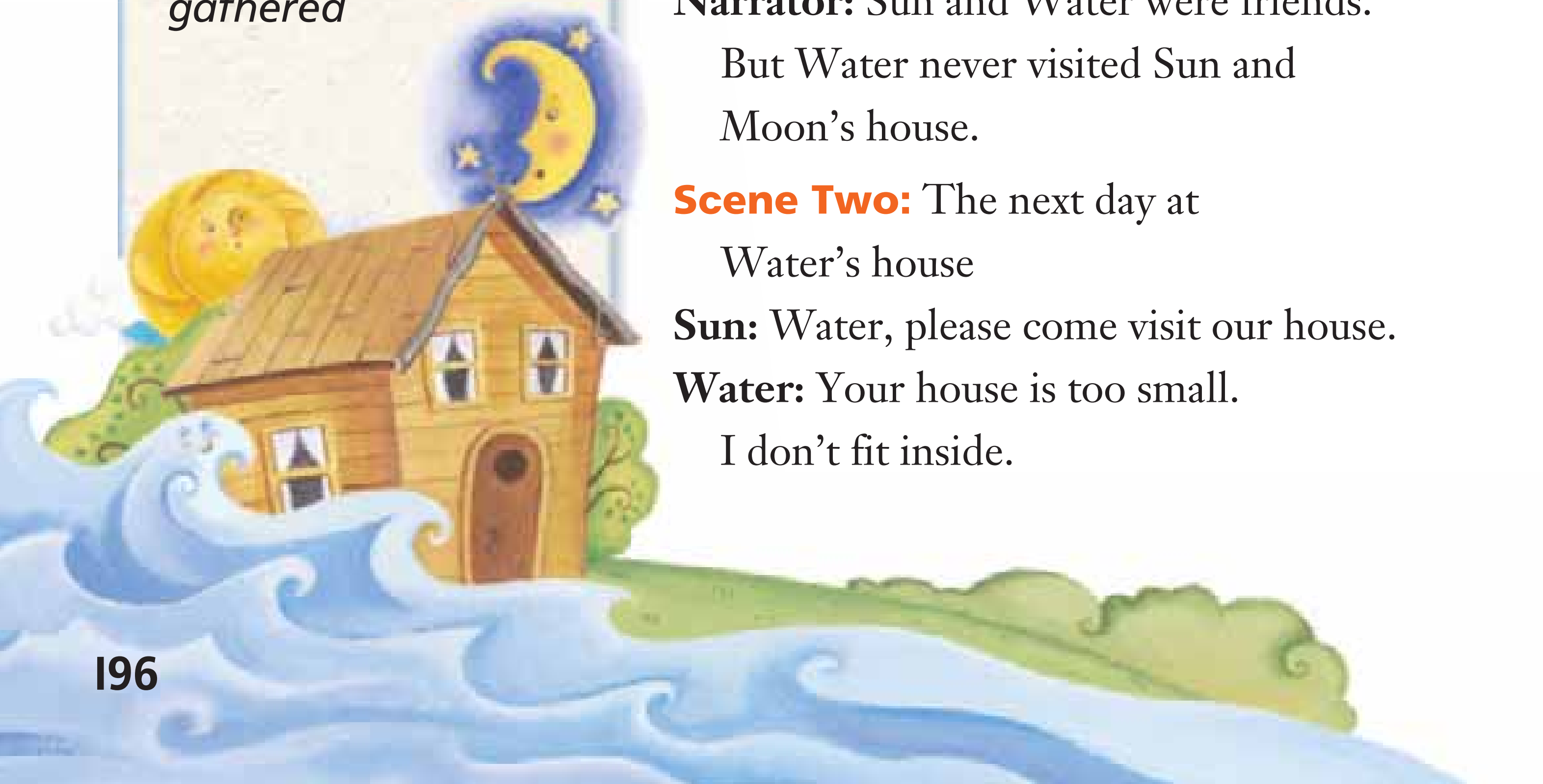
Sun: Yes, clouds do not take those shapes **randomly**. The clouds don't look that way by accident. Water controls the clouds. I think he's asking me to visit.

Narrator: Sun and Water were friends. But Water never visited Sun and Moon's house.

Scene Two: The next day at Water's house

Sun: Water, please come visit our house.

Water: Your house is too small. I don't fit inside.



Sun: Moon and I will build a big new house so you can visit.

Scene Three: Sun and Moon's house

Narrator: Later, Sun told Moon his plan. Moon thought it was a good idea so she **agreed** to help. They decided to build the house with trees.

Moon: I **gathered** the wood and put it all together.

Sun: Please help me carry it. The ends keep **jabbing** and poking me.

Scene Four: Later at Sun and Moon's new house

Narrator: At last, Sun and Moon finished the house. It was time for Water to visit.

Water: Hello, friends. May I come in?

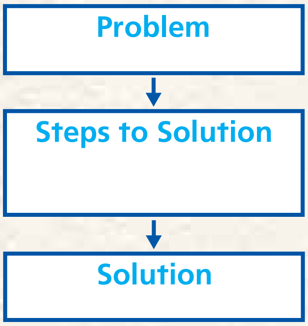
Narrator: Water entered the house and filled every corner. The house was still too small. There was no room left for Sun and Moon. So, they flew to the sky, where they still are today.

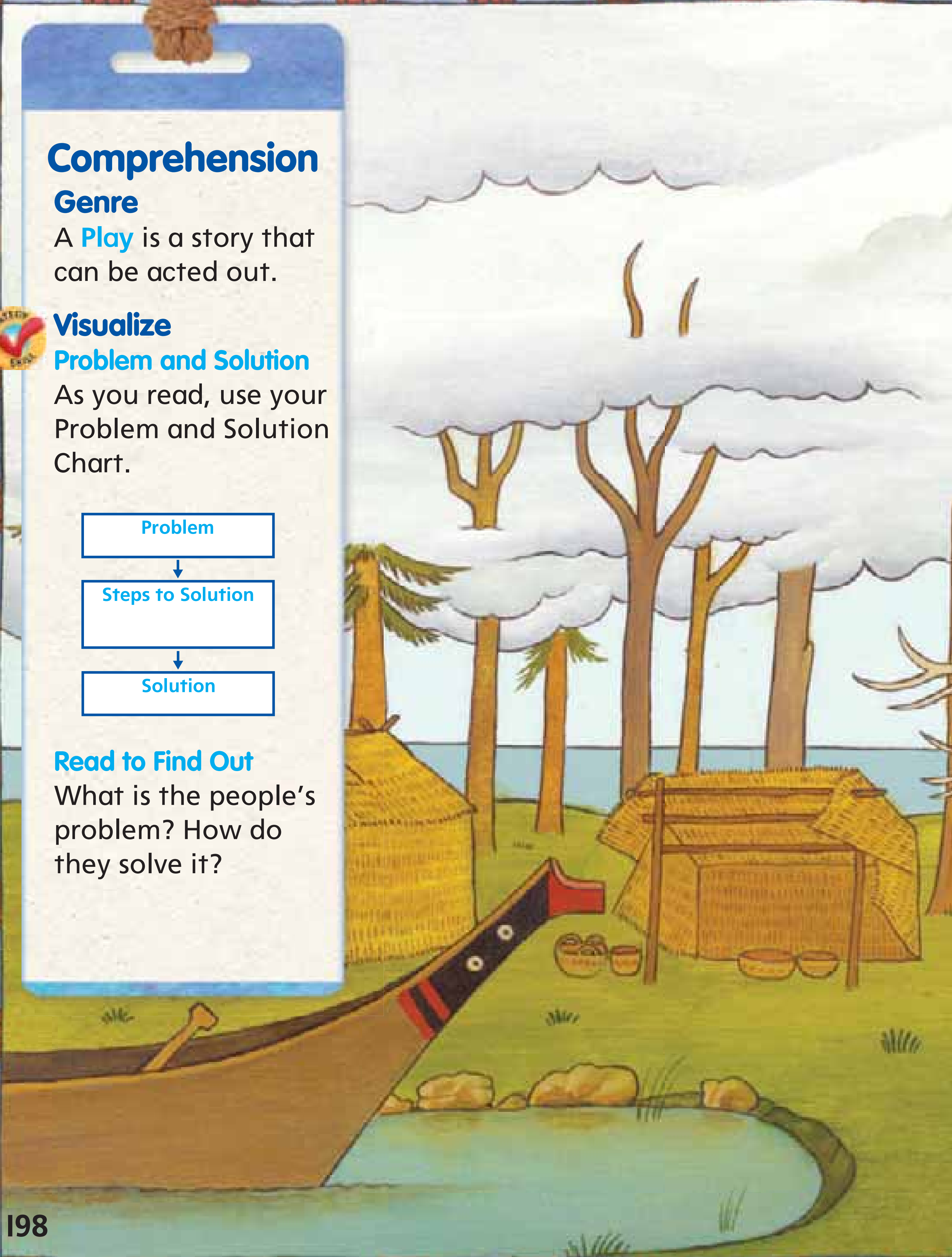
Reread for Comprehension

Visualize

Problem and Solution

Visualizing, or forming pictures in your mind, can help you understand the problem and solution in a story. Reread the play and use the chart to better understand the problem the characters faced and how they solved it.





Comprehension

Genre

A **Play** is a story that can be acted out.

Visualize

Problem and Solution

As you read, use your Problem and Solution Chart.

Problem
↓
Steps to Solution
↓
Solution

Read to Find Out

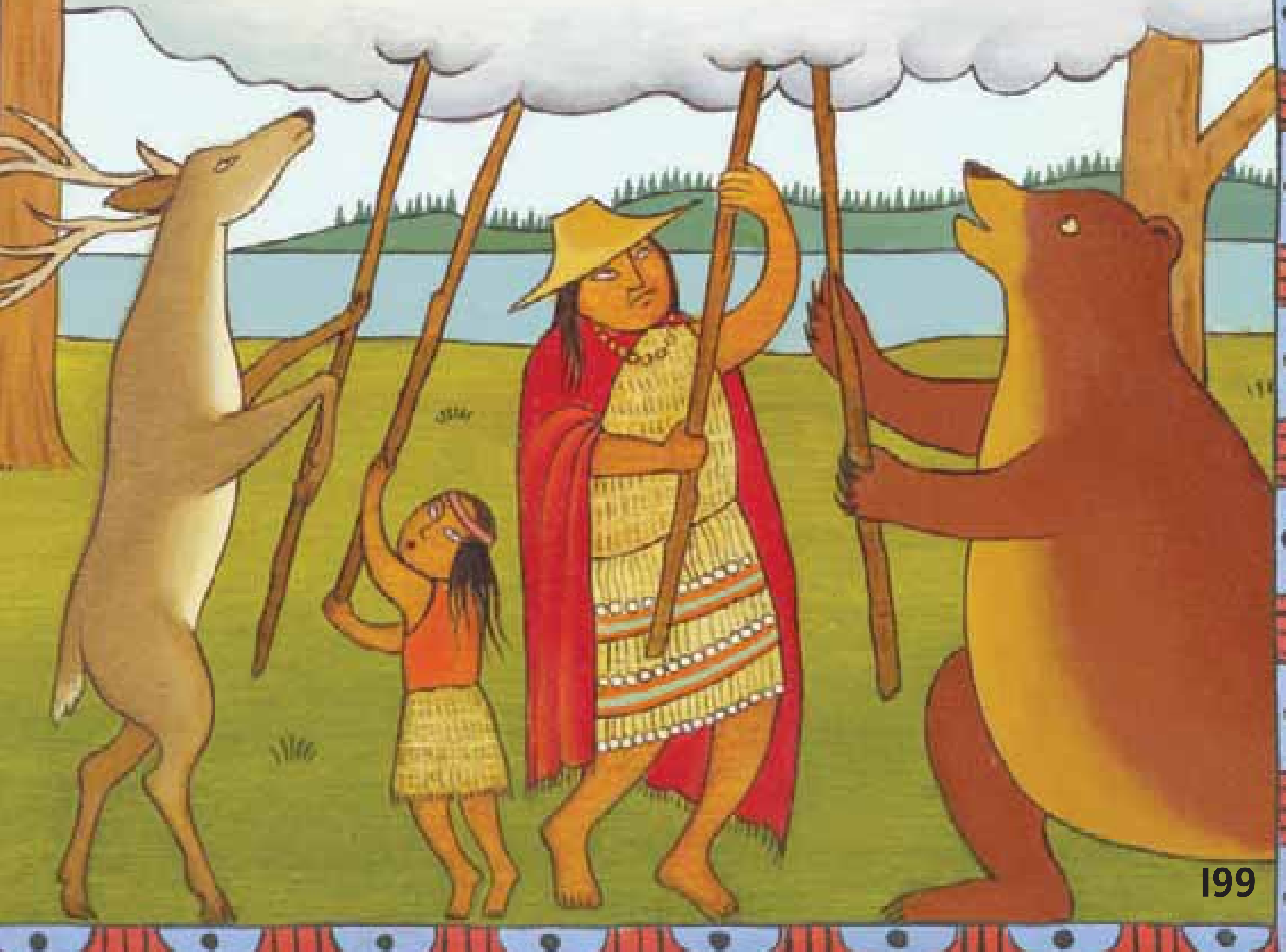
What is the people's problem? How do they solve it?

Pushing Up the Sky

Award Winning Author

BY JOSEPH BRUCHAC

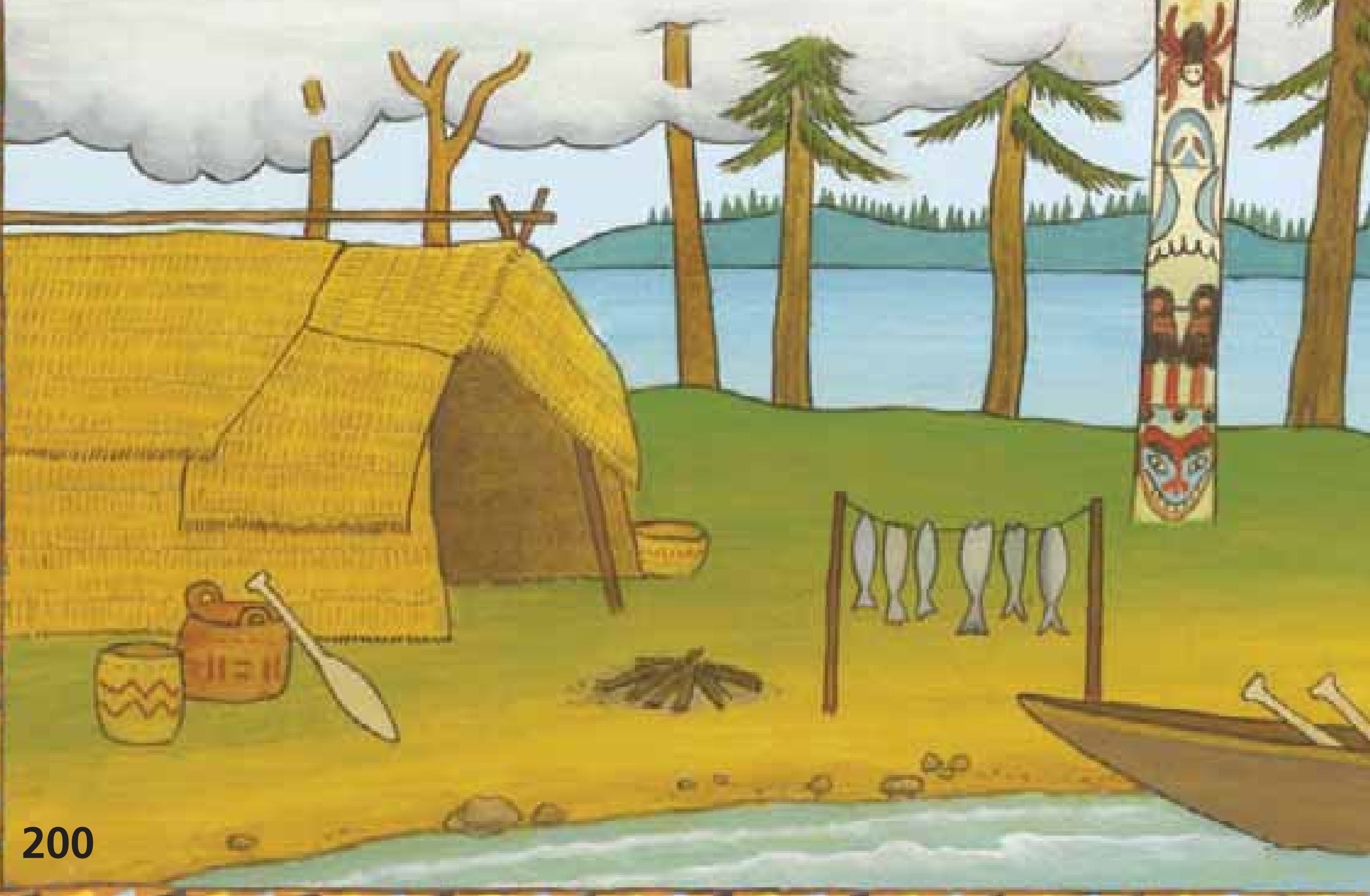
ILLUSTRATED BY STEFANO VITALE

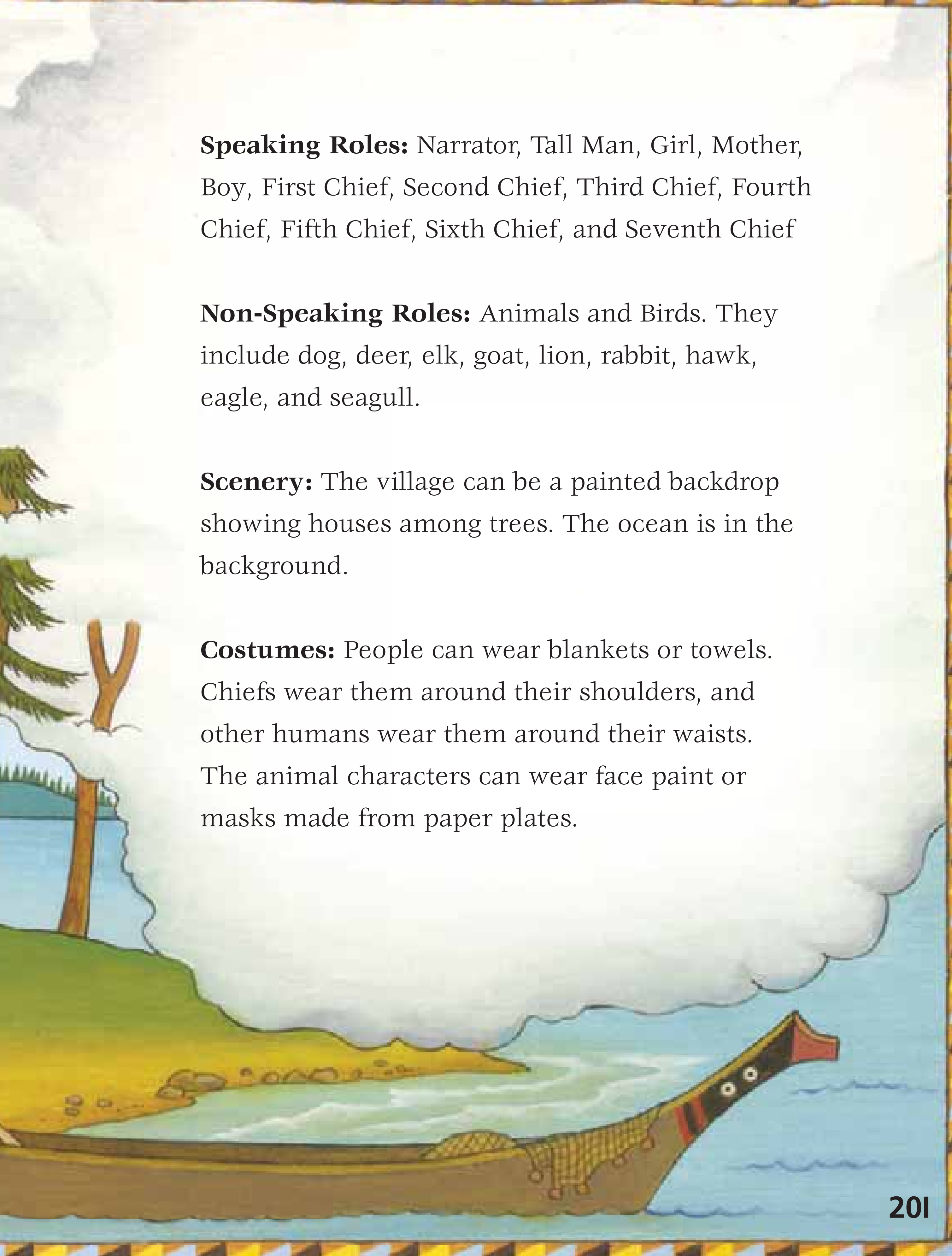


SNOHOMISH

The Snohomish people lived in the area of the Northwest that is now known as the state of Washington. They fished in the ocean and **gathered** food from the shore. Their homes and many of the things they used every day, such as bowls and canoe paddles, were carved from the trees.

Like many of the other peoples of the area, they also carved totem poles, which recorded the history and stories of their nation. *Pushing Up the Sky* is a Snohomish story carved into a totem pole in Everett, Washington.





Speaking Roles: Narrator, Tall Man, Girl, Mother, Boy, First Chief, Second Chief, Third Chief, Fourth Chief, Fifth Chief, Sixth Chief, and Seventh Chief

Non-Speaking Roles: Animals and Birds. They include dog, deer, elk, goat, lion, rabbit, hawk, eagle, and seagull.

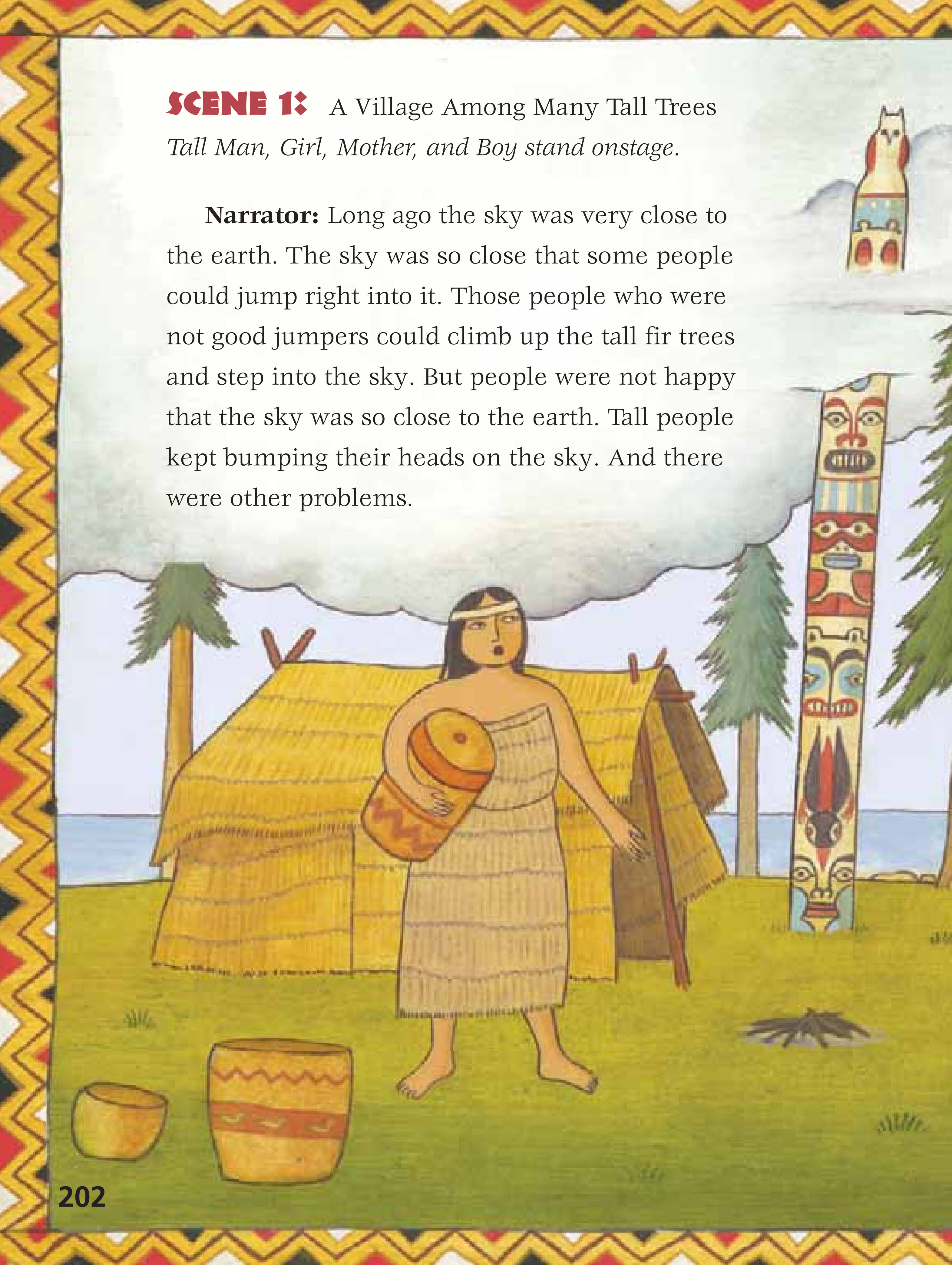
Scenery: The village can be a painted backdrop showing houses among trees. The ocean is in the background.

Costumes: People can wear blankets or towels. Chiefs wear them around their shoulders, and other humans wear them around their waists. The animal characters can wear face paint or masks made from paper plates.

SCENE 1: A Village Among Many Tall Trees

Tall Man, Girl, Mother, and Boy stand onstage.

Narrator: Long ago the sky was very close to the earth. The sky was so close that some people could jump right into it. Those people who were not good jumpers could climb up the tall fir trees and step into the sky. But people were not happy that the sky was so close to the earth. Tall people kept bumping their heads on the sky. And there were other problems.



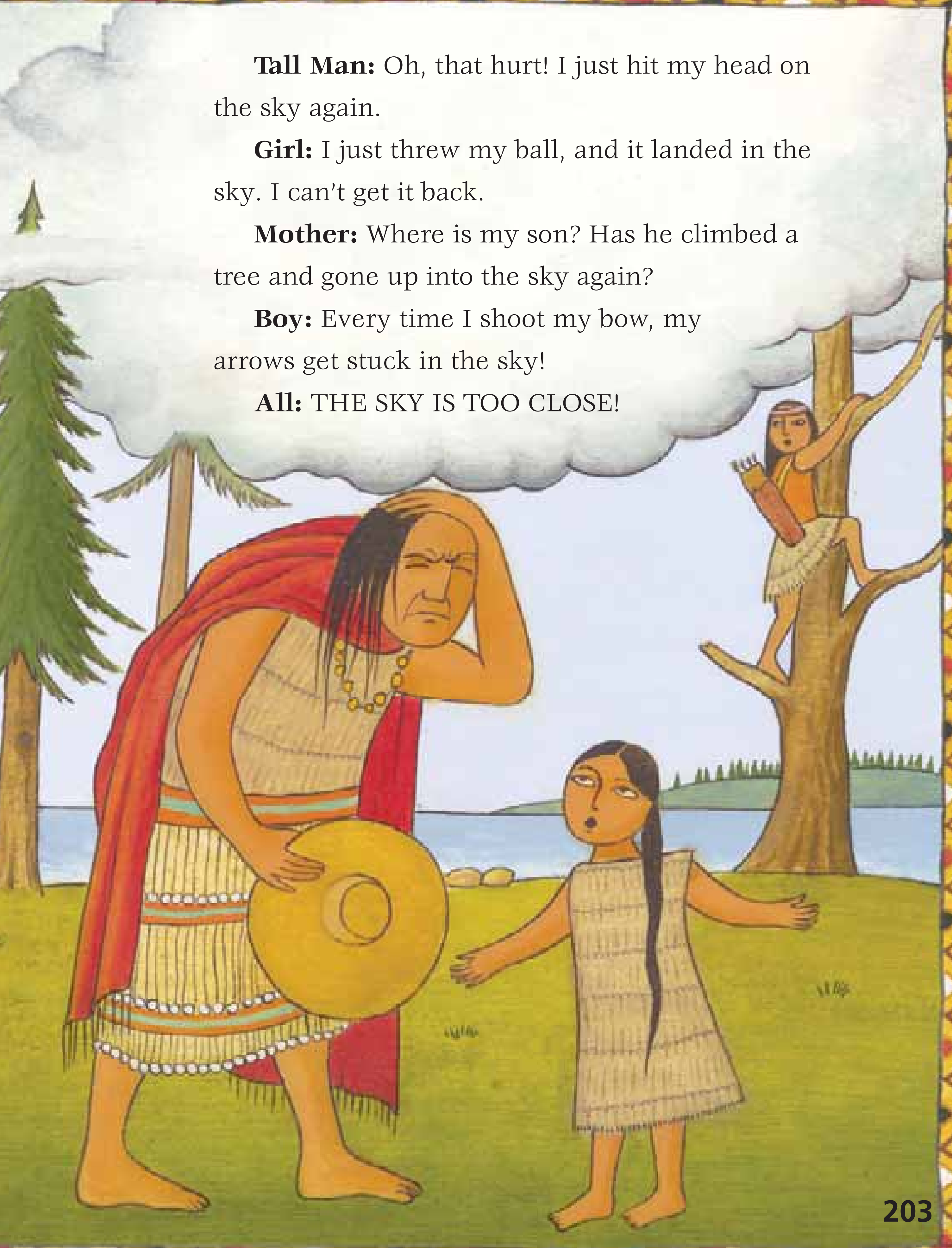
Tall Man: Oh, that hurt! I just hit my head on the sky again.

Girl: I just threw my ball, and it landed in the sky. I can't get it back.

Mother: Where is my son? Has he climbed a tree and gone up into the sky again?

Boy: Every time I shoot my bow, my arrows get stuck in the sky!

All: THE SKY IS TOO CLOSE!



SCENE 2: The Same Village

The seven chiefs stand together onstage.

Narrator: So people decided something had to be done. A great meeting was held for all the different nations. The seven wisest chiefs got together to talk about the problem.

First Chief: My people all think the sky is too close.

Second Chief: A very good job was done of making the world.

Third Chief: That is true, but the sky should have been put up higher. My tall son keeps hitting his head on the sky.

Fourth Chief: My daughter keeps losing her ball in the sky.

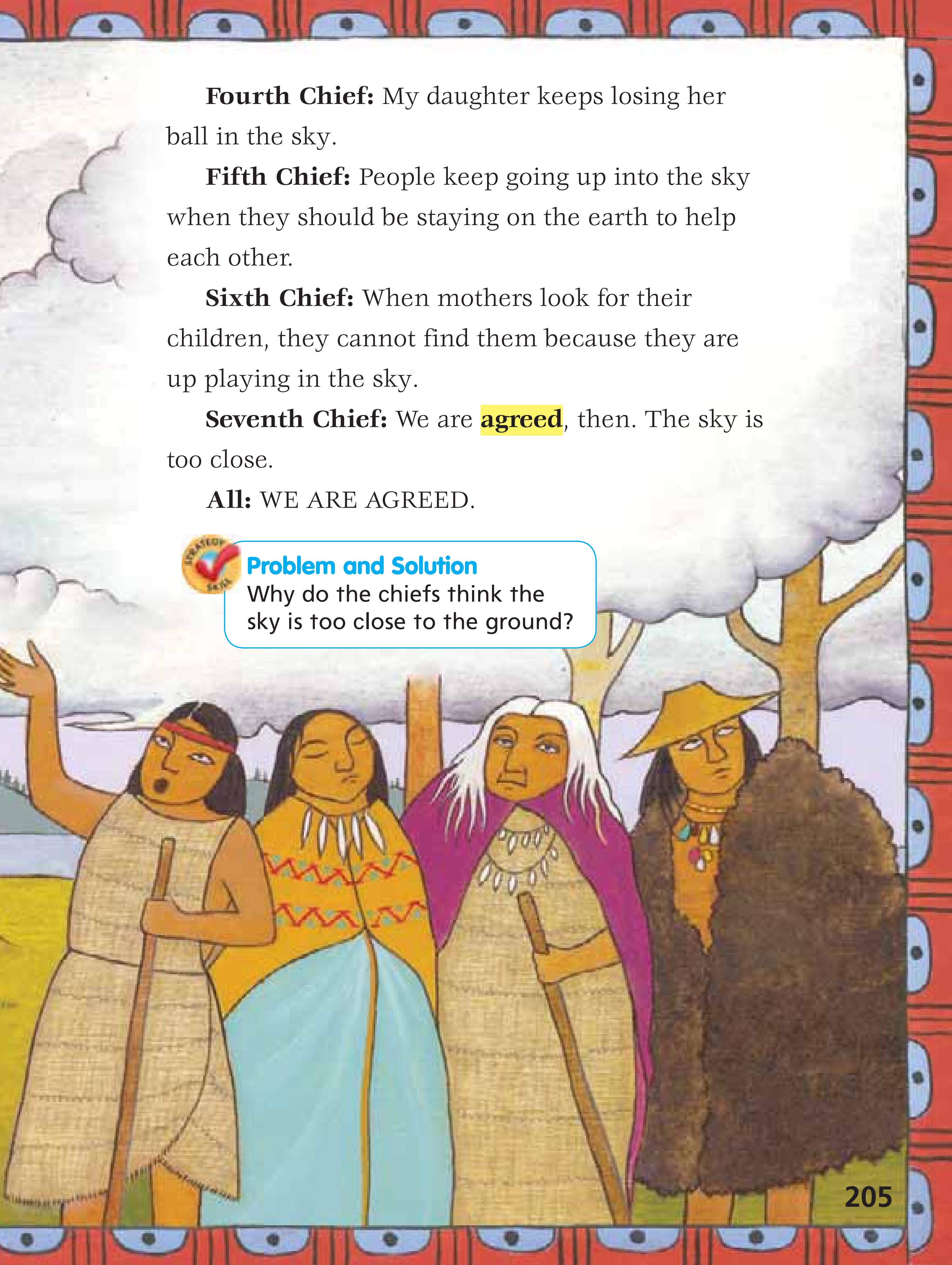
Fifth Chief: People keep going up into the sky when they should be staying on the earth to help each other.

Sixth Chief: When mothers look for their children, they cannot find them because they are up playing in the sky.

Seventh Chief: We are **agreed**, then. The sky is too close.

All: WE ARE AGREED.

Problem and Solution
Why do the chiefs think the sky is too close to the ground?



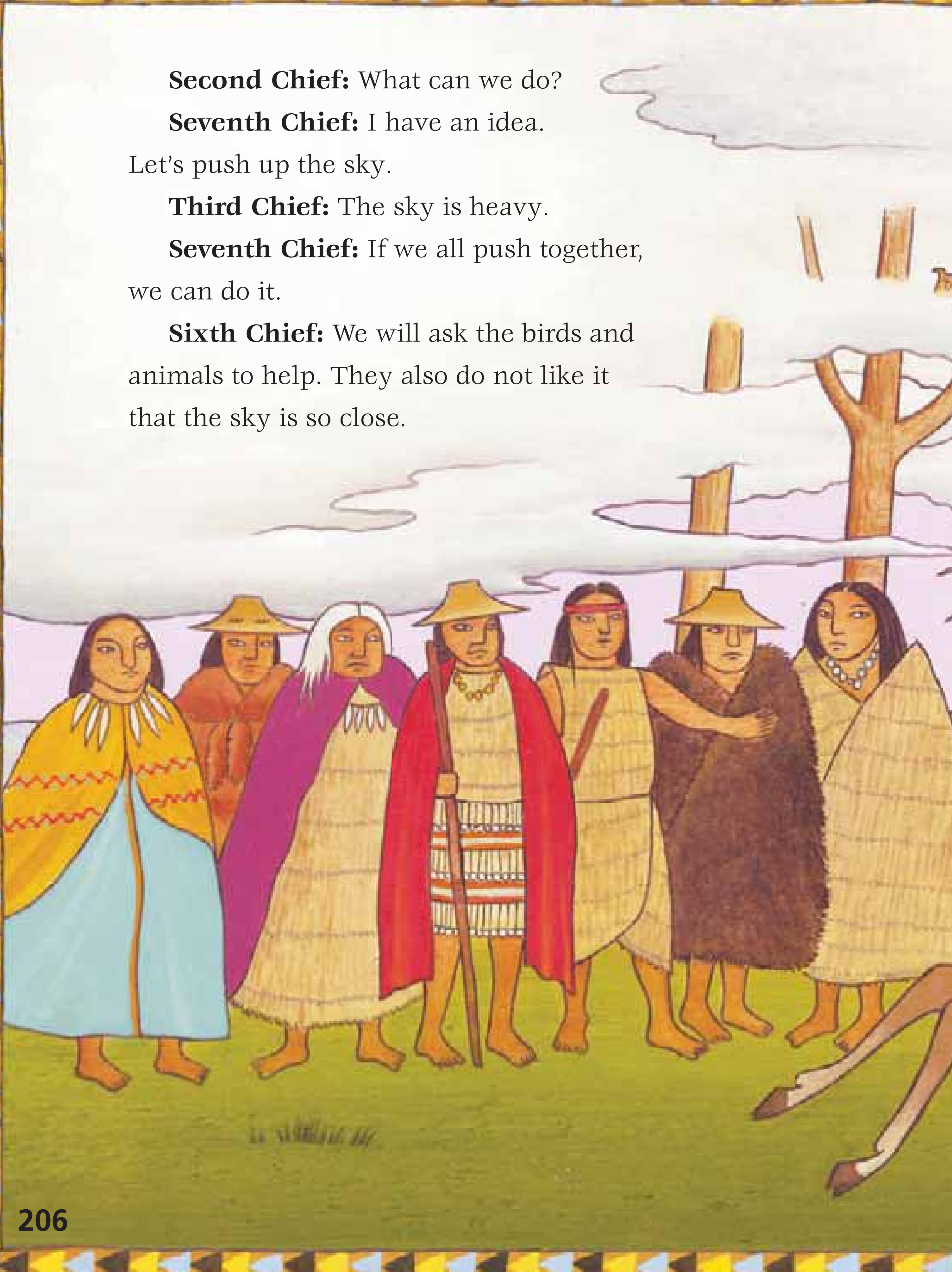
Second Chief: What can we do?

Seventh Chief: I have an idea. Let's push up the sky.

Third Chief: The sky is heavy.

Seventh Chief: If we all push together, we can do it.

Sixth Chief: We will ask the birds and animals to help. They also do not like it that the sky is so close.



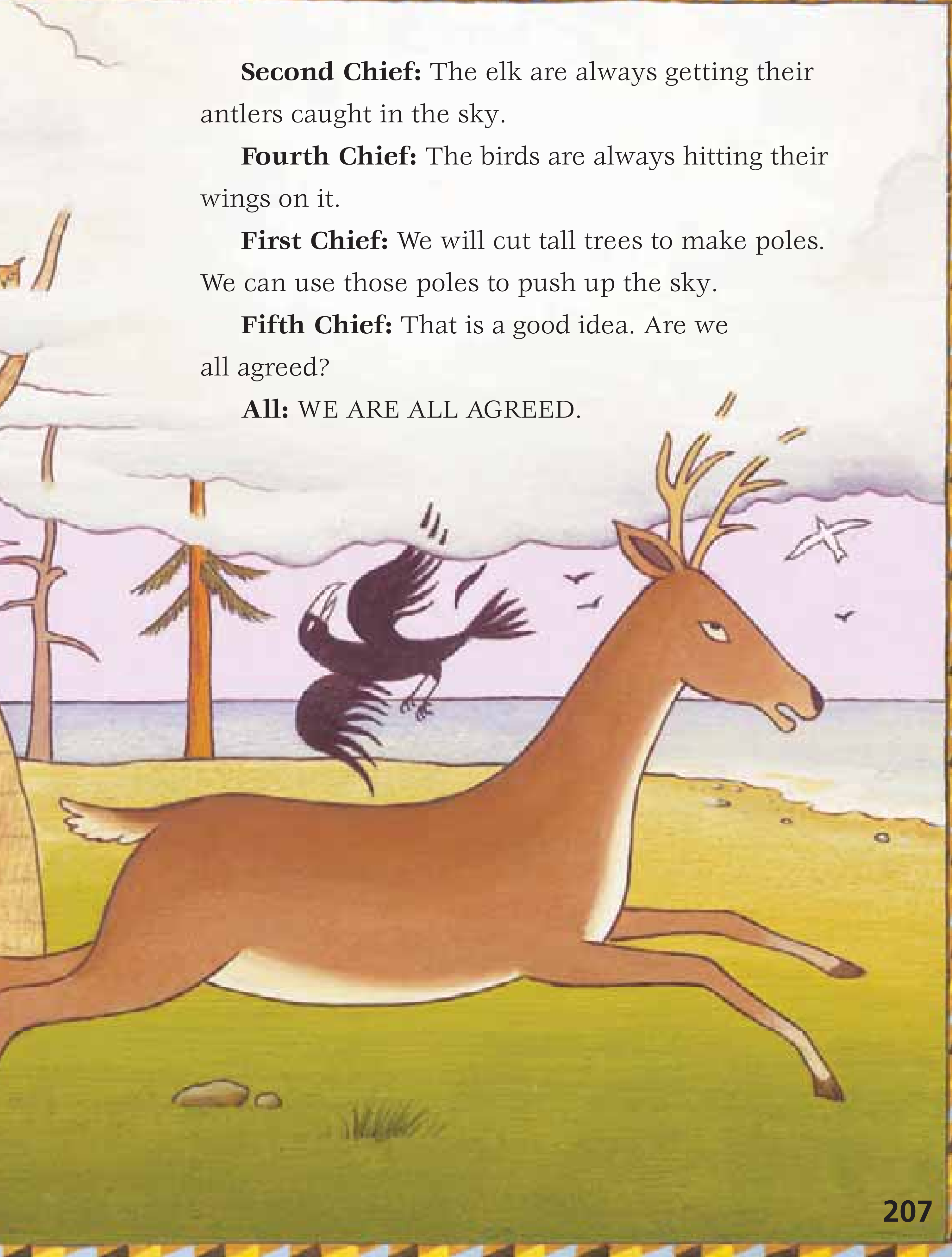
Second Chief: The elk are always getting their antlers caught in the sky.

Fourth Chief: The birds are always hitting their wings on it.

First Chief: We will cut tall trees to make poles. We can use those poles to push up the sky.

Fifth Chief: That is a good idea. Are we all agreed?

All: WE ARE ALL AGREED.



SCENE 3: The Same Village

All the people, except Seventh Chief, are gathered together. They hold long poles. The Birds and Animals are with them. They all begin pushing ***randomly****. They are* ***jabbing*** *their poles into the air. (The sky can be imagined as just above them.)*

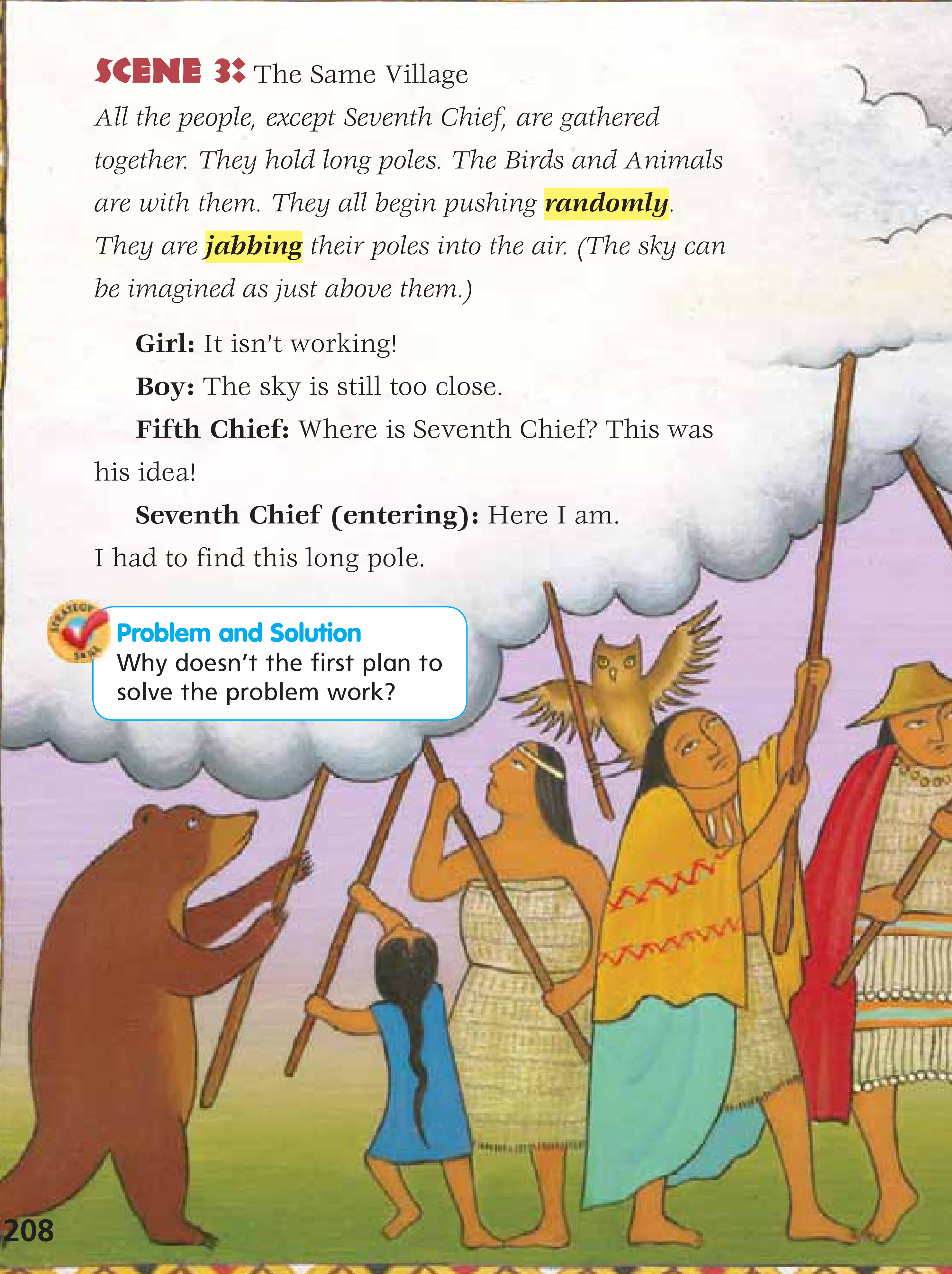
Girl: It isn't working!

Boy: The sky is still too close.

Fifth Chief: Where is Seventh Chief? This was his idea!

Seventh Chief (entering): Here I am. I had to find this long pole.

Problem and Solution
Why doesn't the first plan to solve the problem work?



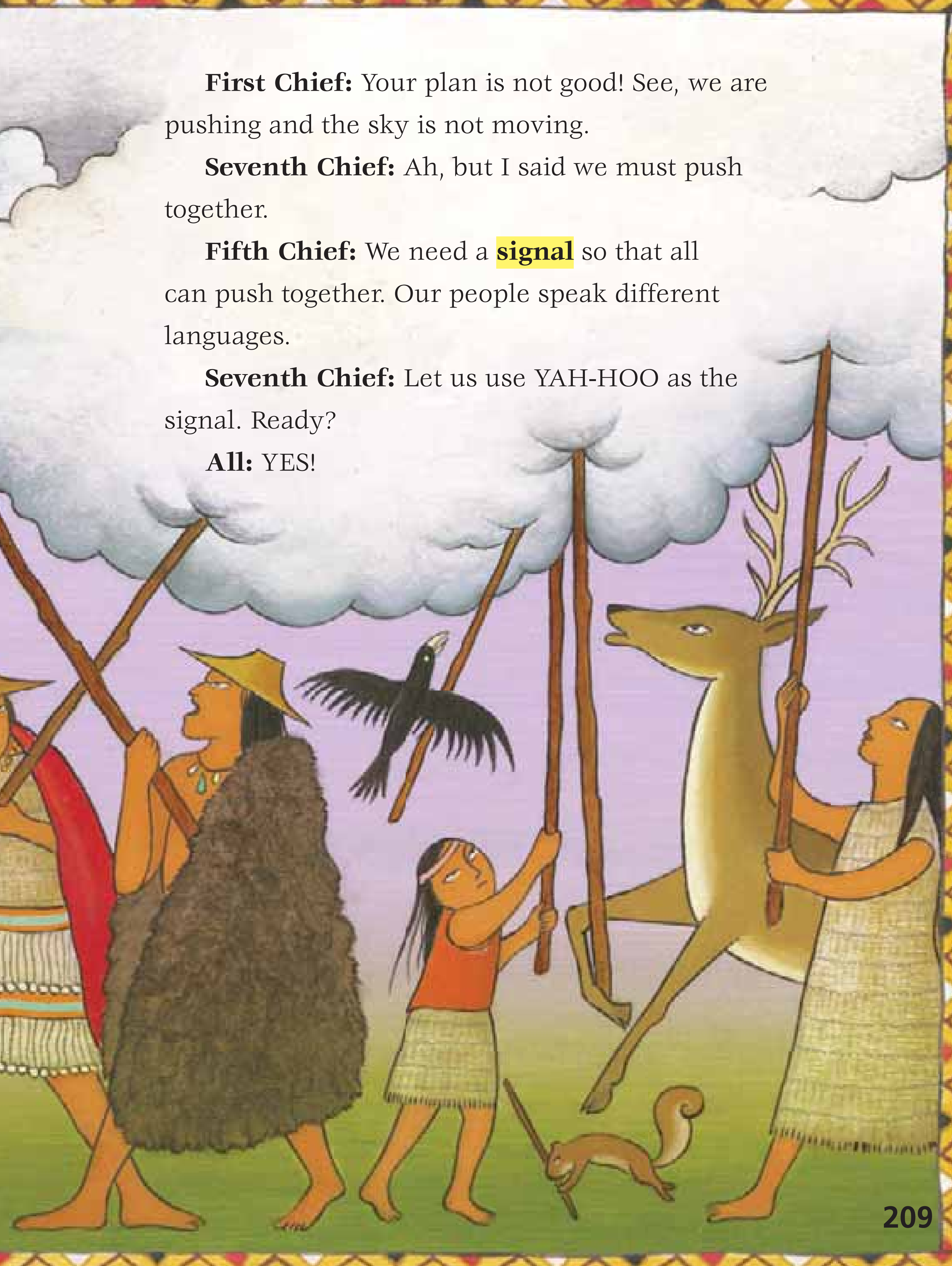
First Chief: Your plan is not good! See, we are pushing and the sky is not moving.

Seventh Chief: Ah, but I said we must push together.

Fifth Chief: We need a **signal** so that all can push together. Our people speak different languages.

Seventh Chief: Let us use YAH-HOO as the signal. Ready?

All: YES!



Seventh Chief: YAH-HOO.

At the signal everyone pushes together.

All: YAH-HOO!

Seventh Chief: YAH-HOO.

Again everyone pushes together.

All: YAH-HOO!

Tall Man: We are doing it!

Mother: Now my son won't be able to hide in the sky!

Seventh Chief: YAH-HOO.

Again everyone pushes together.

All: YAH-HOO!

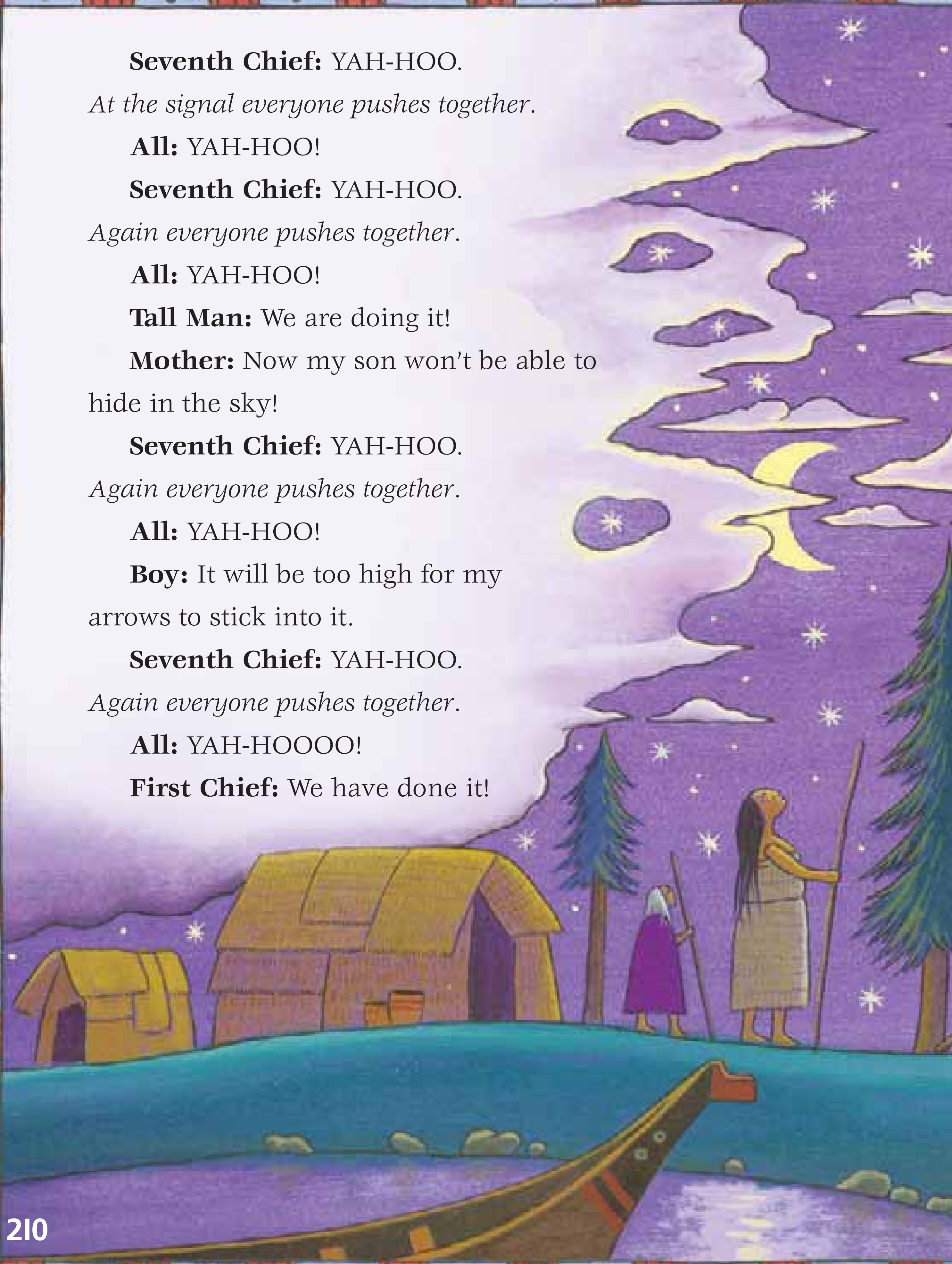
Boy: It will be too high for my arrows to stick into it.

Seventh Chief: YAH-HOO.

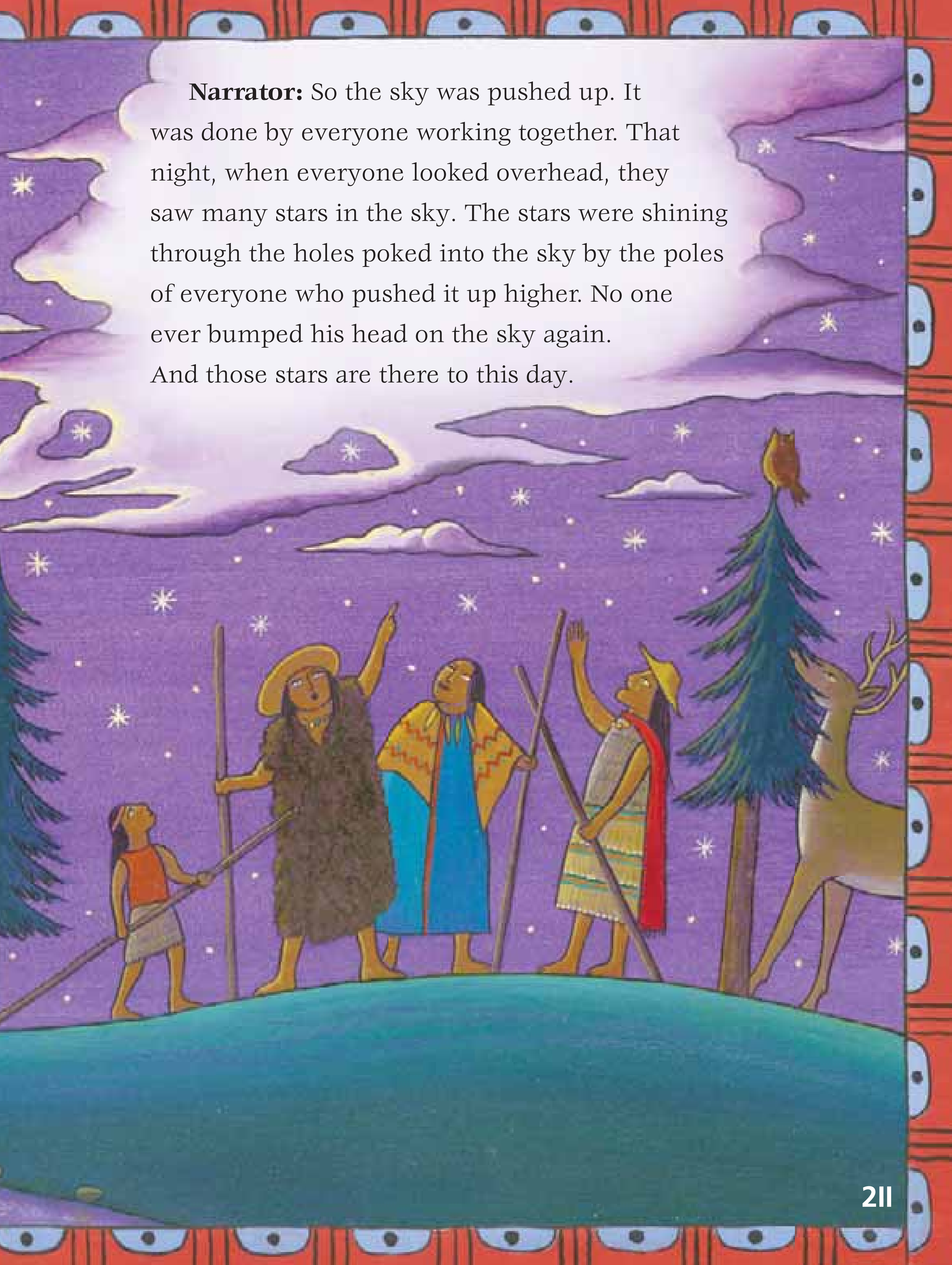
Again everyone pushes together.

All: YAH-HOOOO!

First Chief: We have done it!



Narrator: So the sky was pushed up. It was done by everyone working together. That night, when everyone looked overhead, they saw many stars in the sky. The stars were shining through the holes poked into the sky by the poles of everyone who pushed it up higher. No one ever bumped his head on the sky again. And those stars are there to this day.

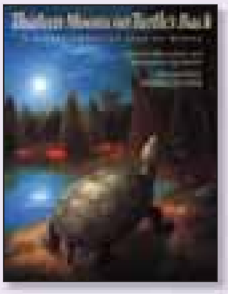


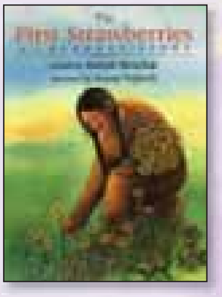
MEET THE AUTHOR AND ILLUSTRATOR

Joseph Bruchac writes stories, plays, poems, and articles for children and adults. He is also a storyteller and performs around the country. Joseph is an Abenaki Native American. All of his work centers on keeping alive the Abenaki culture and that of other Native American peoples.

Stefano Vitale grew up in Italy, where he studied art. Stefano especially likes to create pictures on wood. "There is an ancient quality to wood. It has wisdom and age," he says.

Other books written by Joseph Bruchac





LOG ON Find out more about Joseph Bruchac at **www.macmillanmh.com**

Author's Purpose

Joseph Bruchac wrote about working together to entertain readers. Think about an activity that you do with others. Write about how each person is important.

Comprehension Check

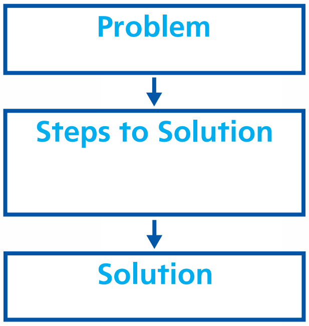
Retell the Story

Use the Retelling Cards to retell the story.

Retelling Cards

Think and Compare

1. What is the problem in this play? How is the problem solved? **Visualize: Problem and Solution**



2. Reread pages 208–209. Why is it important for the people to have a signal to push up the sky? **Analyze**

3. Have you ever worked with your friends or classmates to solve a problem? How did you do it? **Apply**

4. What did you learn from this play about working with others? **Synthesize**

5. How is this play like "Why Sun and Moon Live in the Sky" on pages 196–197? **Reading/Writing Across Texts**

Performing Arts

Genre

A **Nonfiction Article** gives facts about real people, things, or events.

Text Feature

Interviews are questions asked by one person and answered by another.

Content Vocabulary

author

interviewed

appeal

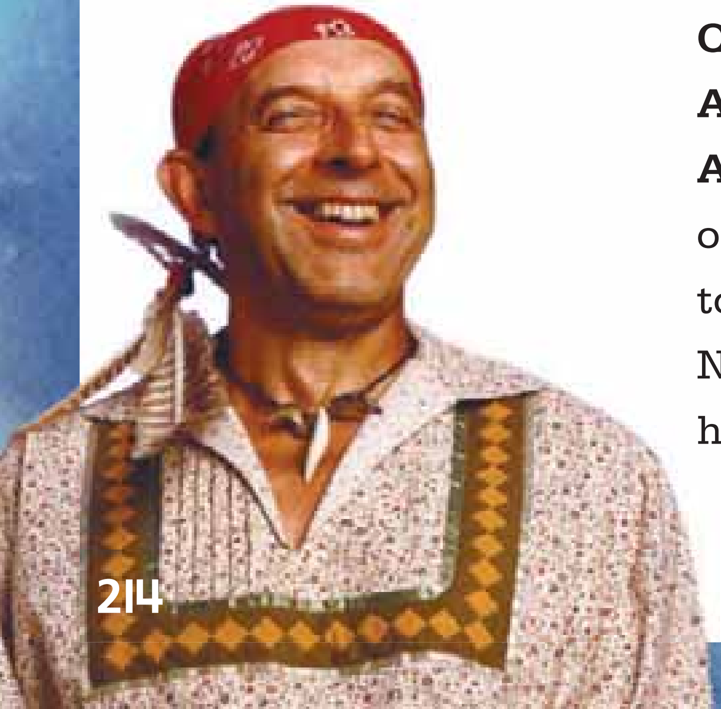
GETTING TO KNOW JOSEPH BRUCHAC

BY CHRIS LOBACK

Joseph Bruchac is the **author** who wrote *Pushing Up the Sky.* To learn more about Mr. Bruchac, we **interviewed** him. We asked him questions about his work and he answered them. In this interview the words after **Q:** are the question the interviewer asked. The words after **A:** are Joseph Bruchac's answer.

Q: Why do you write Native American stories?

A: I think that they **appeal** to a lot of people. Children and adults have told me that they like to read them. Native American stories are fun to hear and also teach good lessons.



Q: Why do you write plays?

A: I write plays for two reasons. The first is that many teachers told me it was hard to find good Native American plays for kids. The second reason is that I love to give kids the chance to take part in a story.

Q: Which of your stories do you like the best?

A: My favorites are the stories with monsters and scary events in them. One of these is *Skeleton Man*. I like this scary story because it shows how even a child can beat a monster if she does the right thing!

Connect and Compare

1. What is one reason Joseph Bruchac writes plays? **Interview**
2. Think about this interview and *Pushing Up the Sky*. Do you think this is one of Joseph Bruchac's favorite stories? Explain why or why not. **Reading/Writing Across Texts**

Performing Arts Activity

Find another play by Joseph Bruchac. Perform it with other students.

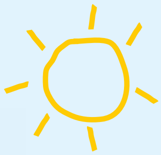
LOG ON Find more about plays at **www.macmillanmh.com**

Write a Play

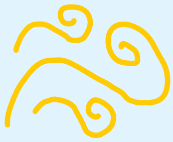
Writer's Craft

Beginning, Middle, and End

A play has a special form. The characters have lines. The character's name is written before each line. A play has a good **beginning, middle, and end**.



Sun and Wind



by Joe M.

Characters: Narrator, Wind, Sun, Man

Narrator: Wind and Sun were fighting.

Wind: I am stronger than you, Sun.

Sun: No, you're not, Wind. Prove it.

Wind: Do you see that man? Whoever can make him take off his coat is stronger.

Sun: Wind, you can go first.

Man: Brrrr. The wind is cold. I will button up my coat to keep warm.

Wind: I give up. It's your turn, Sun.

Man: The sun is out. Now it is warm. I will take off this heavy coat.

Wind: You win, Sun. You are stronger.

I used the correct form. I gave my characters lines to speak.

My play has a good beginning, middle, and end.

Your Turn

Write a play about make-believe characters. Follow the form of Joe's model to write your play. If you use the pronoun *I*, remember to capitalize it. Then use the Writer's Checklist to check your writing.

Writer's Checklist

- ☐ **Organization:** Does my play use the correct form and have a good **beginning, middle, and end**?
- ☑ **Ideas:** Is my play about something make-believe?
- ☑ **Conventions:** Did I use pronouns correctly? Did I capitalize *I*?
- ☑ **Sentence Fluency:** Do my sentences flow? Are they interesting when they are read aloud?

Your Turn

Write a play about make-believe characters. Follow the form of Joe's model to write your play. If you use the pronoun *I*, remember to capitalize it. Then use the Writer's Checklist to check your writing.

Writer's Checklist

- ☐ **Organization:** Does my play use the correct form and have a good **beginning, middle, and end**?
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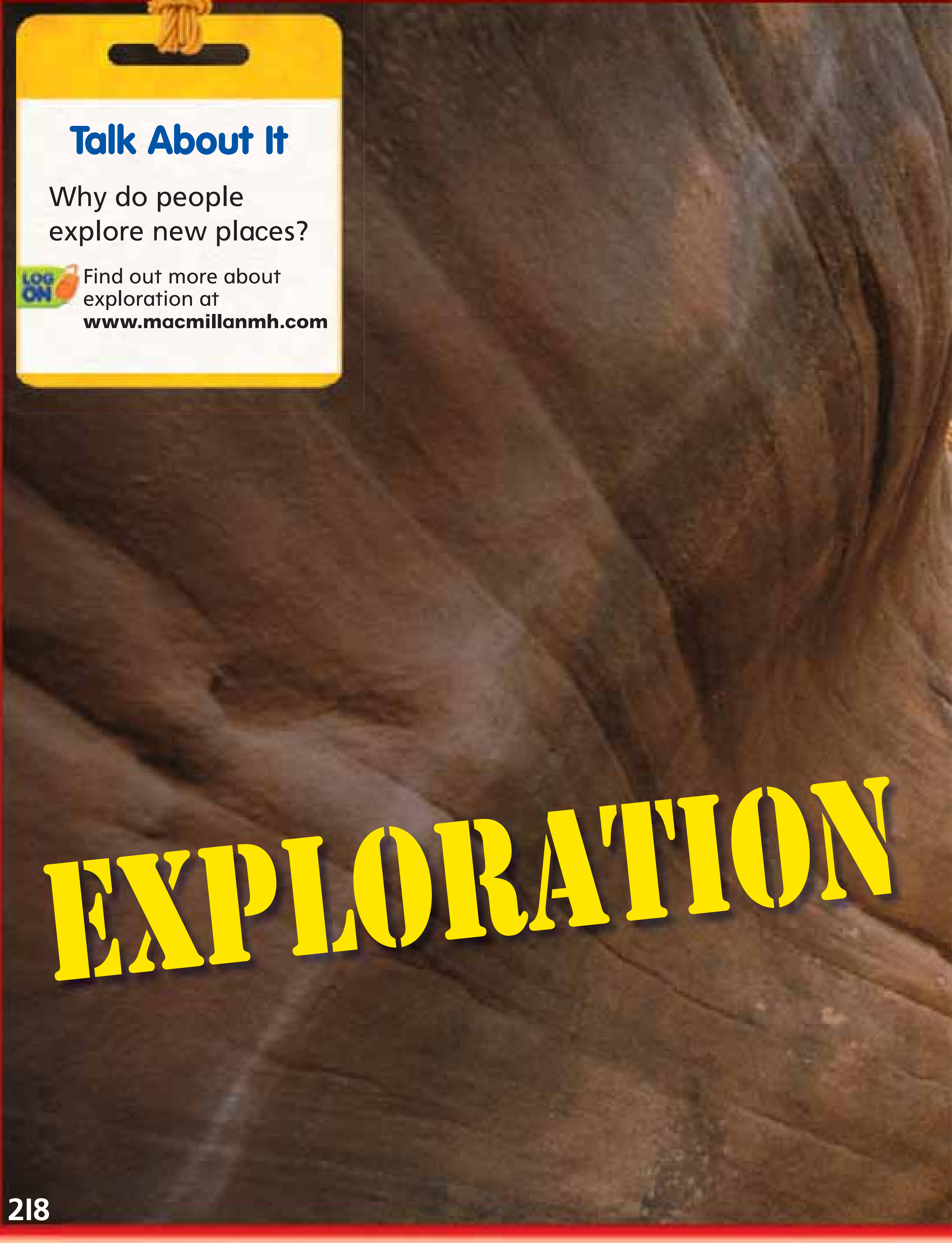
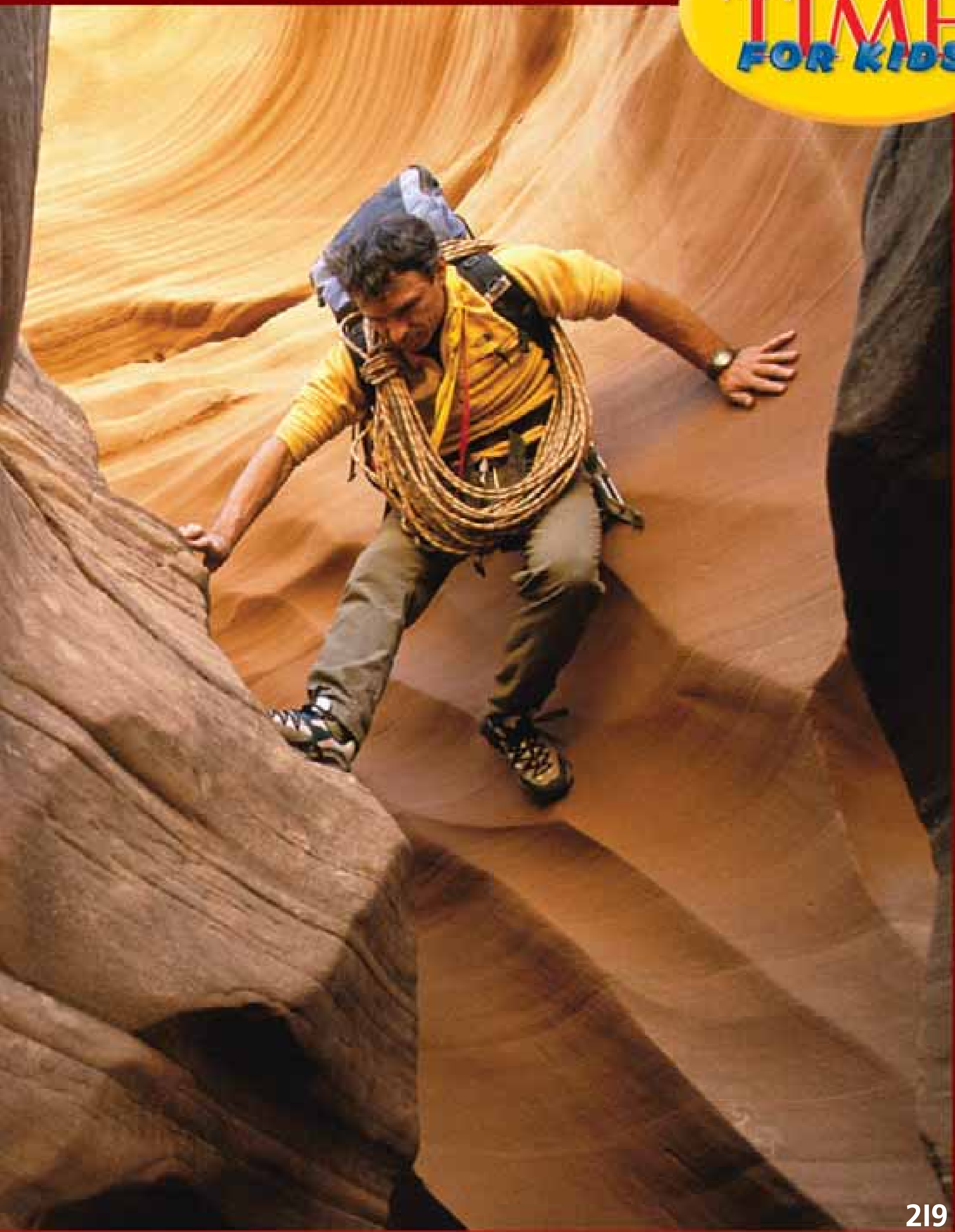


Talk About It

Why do people explore new places?

Find out more about exploration at **www.macmillanmh.com**

EXPLORATION



Real World Reading

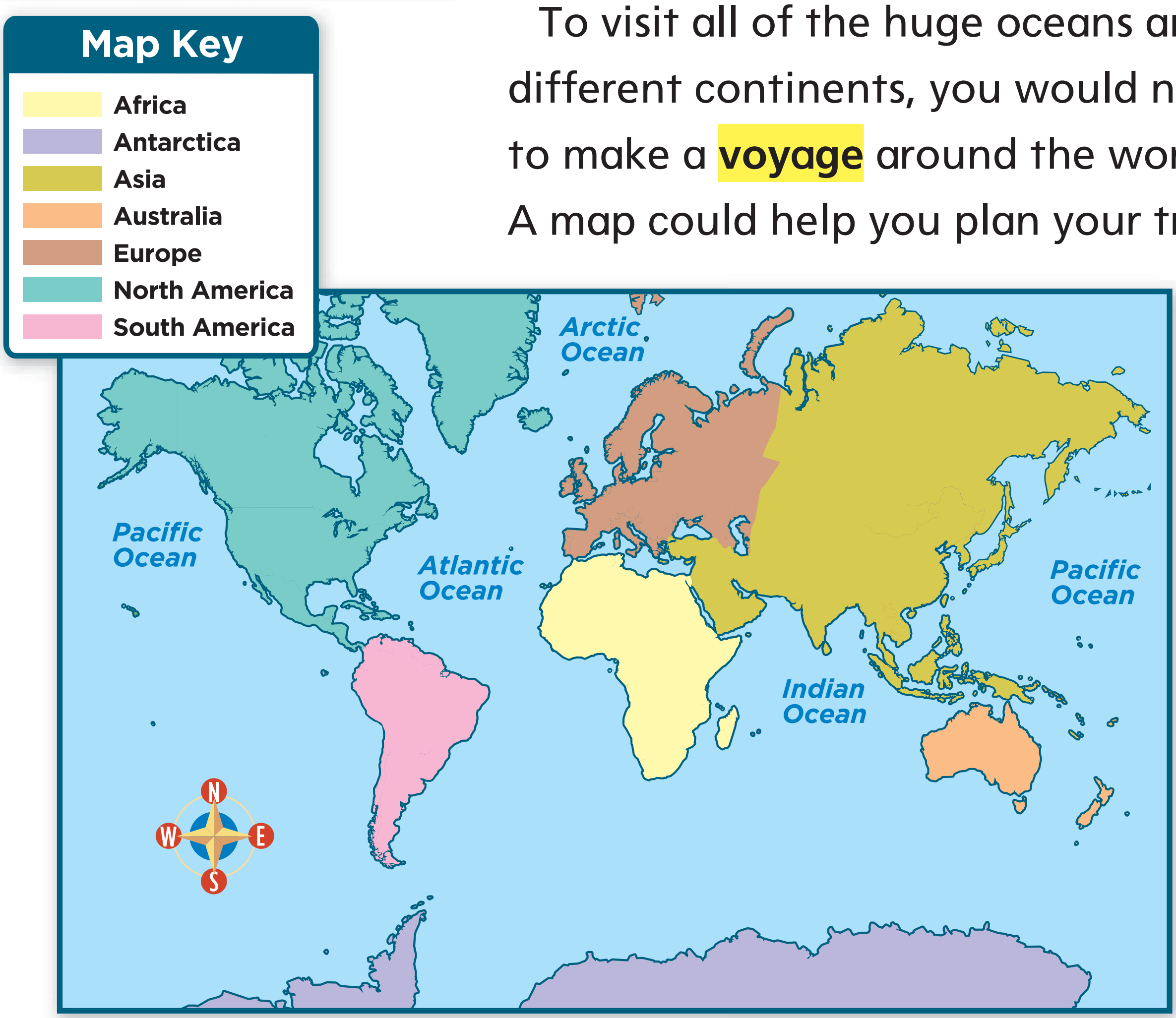
Continents and Oceans

Vocabulary

vast
oceans
areas
voyage
planet

Earth is covered with water and land. There are four **vast** bodies of water called **oceans**. The seven large **areas** of land are called continents.

To visit all of the huge oceans and different continents, you would need to make a **voyage** around the world. A map could help you plan your trip.


Map Key
Africa
Antarctica
Asia
Australia
Europe
North America
South America
Arctic Ocean
Pacific Ocean
Atlantic Ocean
Indian Ocean
Pacific Ocean
N
W
E
S

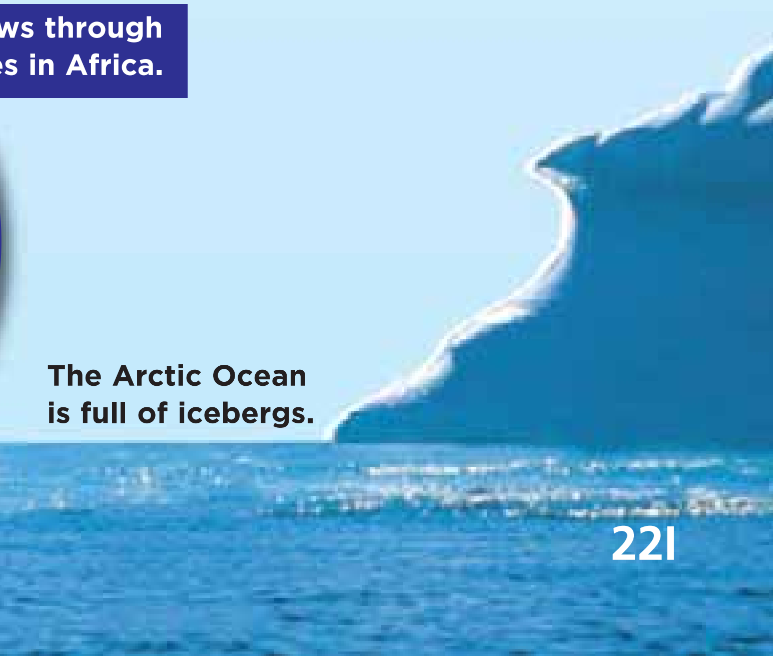
LOG ON Find out more about Earth's continents and oceans at **www.macmillanmh.com**

Record Holders!

How high is the tallest mountain on our **planet**? What is the name of the longest river? Where is the shortest river? If you've ever wondered about Earth's extremes, take a look at these record holders.

Record	Record Holder	The Record
Largest Continent	Asia	17,212,000 square miles
Smallest Continent	Australia	3,132,000 square miles
Highest Mountain	Mount Everest, Asia	29,035 feet
Largest Ocean	Pacific Ocean	60,060,700 square miles
Smallest Ocean	Arctic Ocean	5,427,000 square miles
Longest River	Nile, Africa	4,160 miles
Shortest River	D, North America	120 feet

The Nile flows through ten countries in Africa.



The Arctic Ocean is full of icebergs.

Comprehension

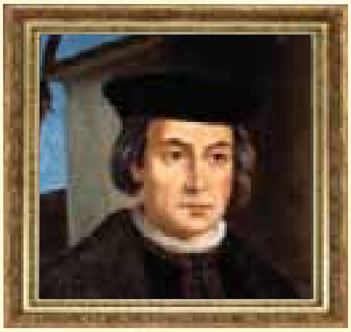
Genre

A **Nonfiction Article** gives information about real people, places, and events.

Summarize

Main Ideas and Details

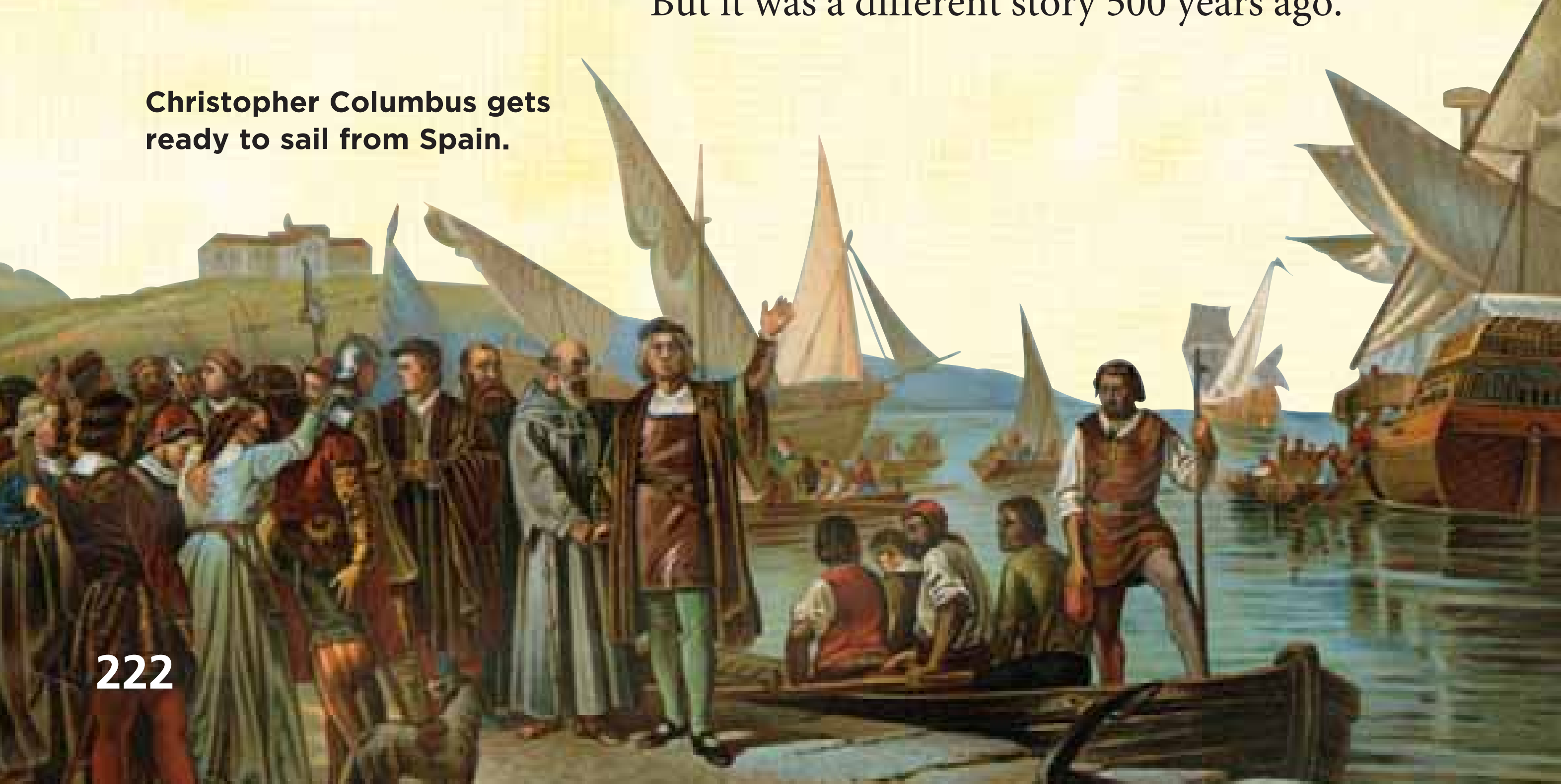
The main idea is what an article is mostly about. Details give more information about the main idea.



Columbus Explores New Lands

What was Columbus looking for when he set sail across the Atlantic Ocean? What did he find?

Today our **planet** may not seem **vast**. People vacation all over the world. Flying across **oceans** can take just a few hours. But it was a different story 500 years ago.



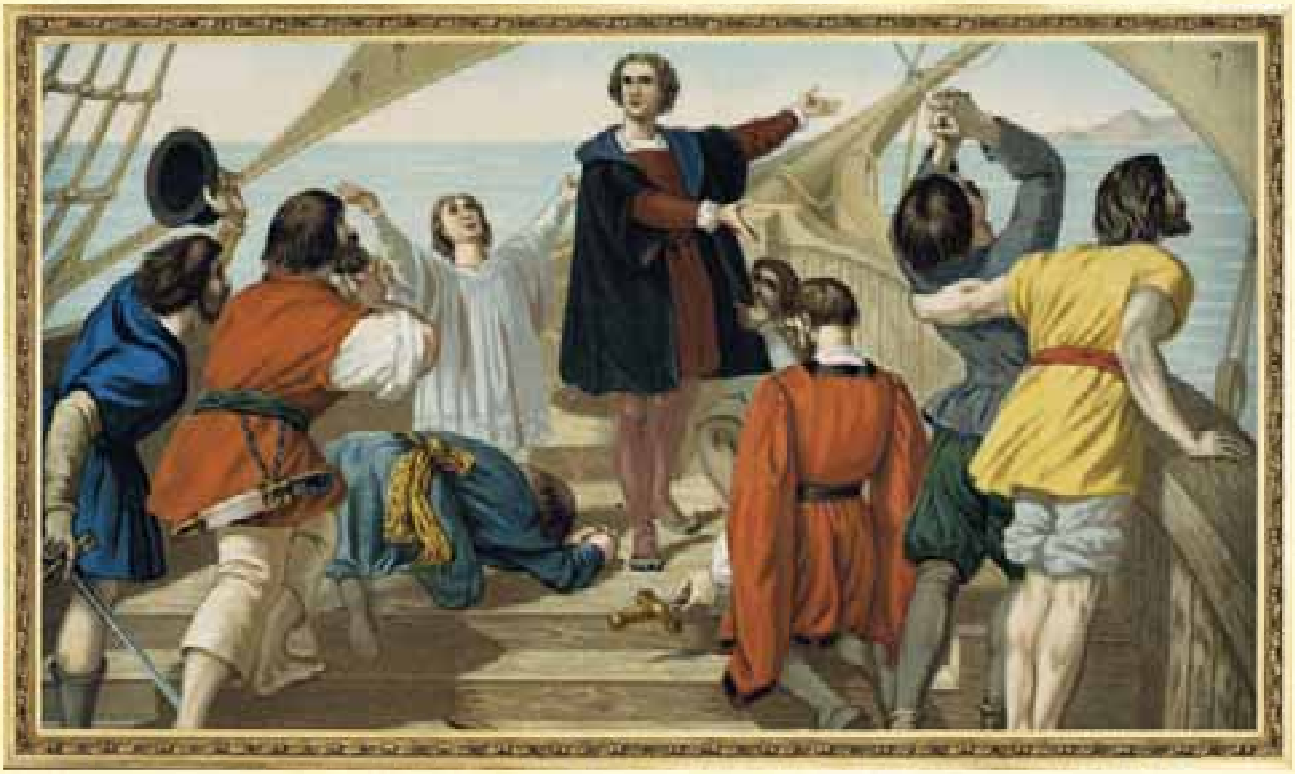
Christopher Columbus gets ready to sail from Spain.

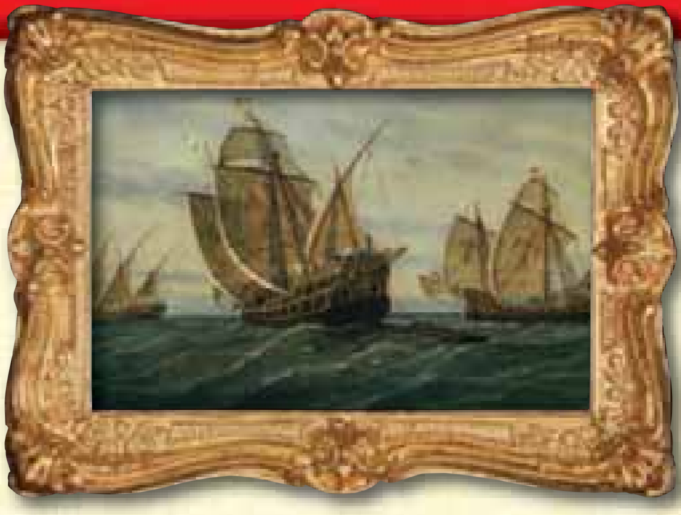
The date was August 3. The year was 1492. Christopher Columbus was about to make a **voyage** across the Atlantic Ocean. He wanted to find a shorter route from Europe to Asia. Leaving Spain with three ships, he had high hopes for success.

On October 12, Columbus and his crew spotted land. It was an island. Columbus called it San Salvador, and that's what we call it today.

During the next few weeks, Columbus traveled around the islands of the Caribbean Sea. Even though these islands are close to North America, Columbus thought they were off the coast of Asia!

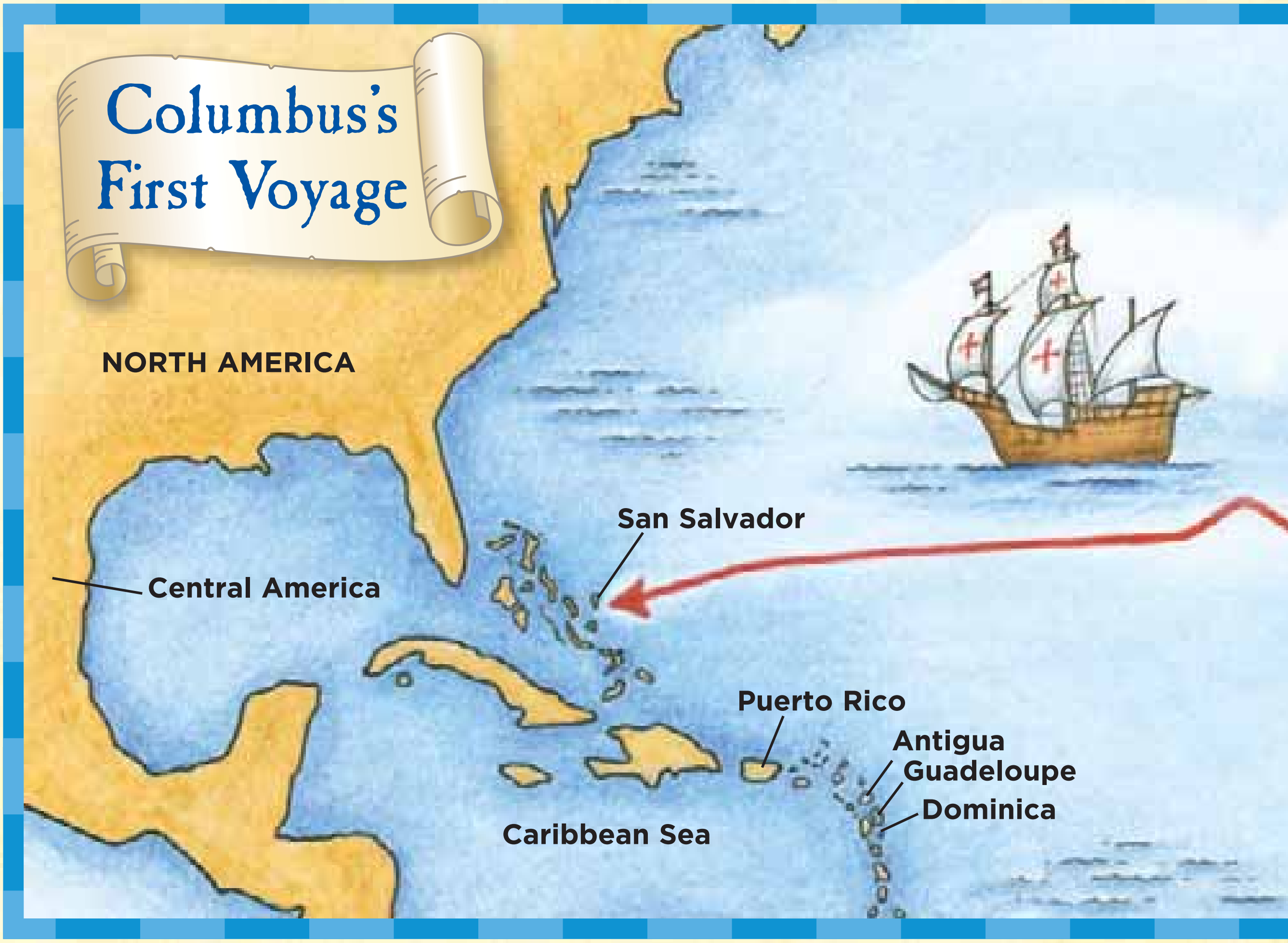
Columbus and his crew celebrated when they spotted land after their long voyage.





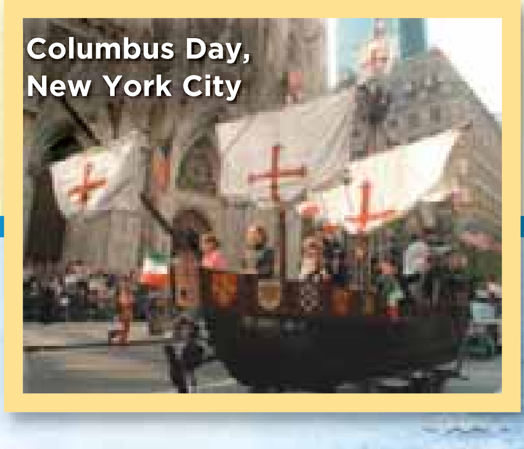
The *Santa Maria* (center) was Columbus's largest ship.

In March 1493, Columbus and his crew returned to Spain. But he wasn't finished traveling! He made three more voyages across the Atlantic Ocean, and no two were alike. During his second voyage, he explored other **areas** in the Caribbean. He visited the islands of Dominica, Guadeloupe, Antigua, and Puerto Rico.

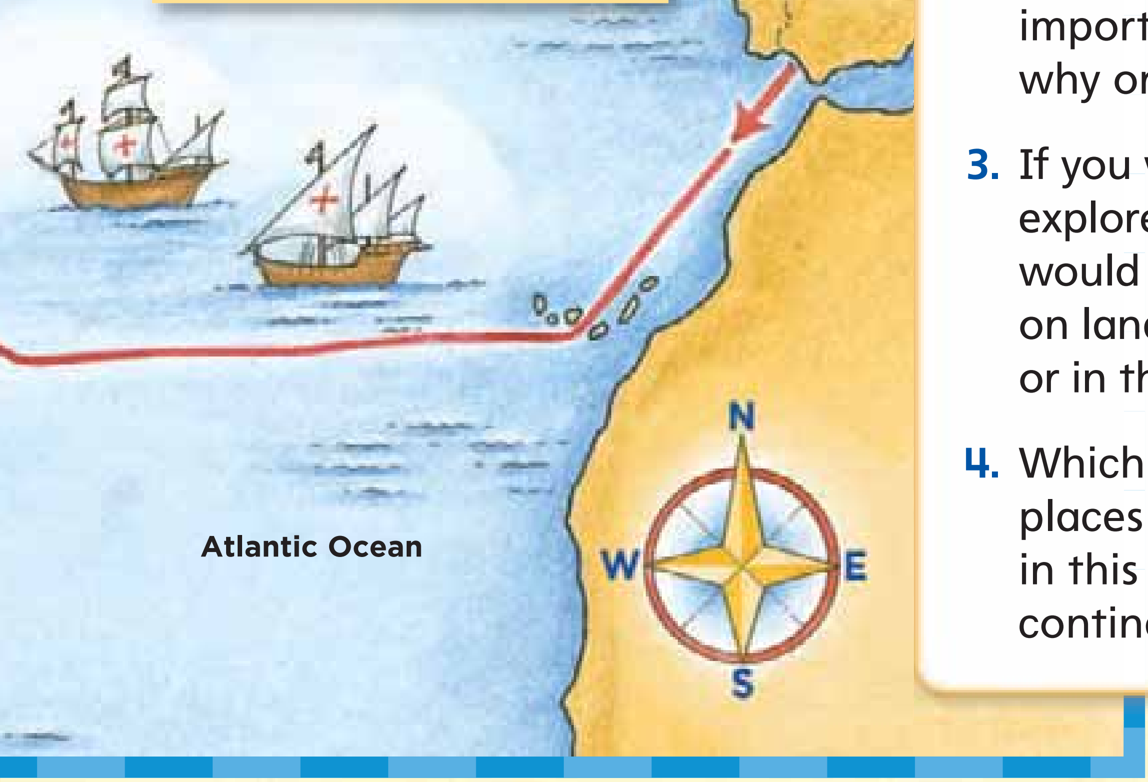

Columbus's First Voyage
NORTH AMERICA
San Salvador
Central America
Puerto Rico
Antigua
Guadeloupe
Dominica
Caribbean Sea

During Columbus's third voyage, in 1498, he landed in South America. By this time he knew he wasn't near Asia. On Columbus's fourth and final voyage, in the early 1500s, he traveled along the coast of Central America.

To remember Columbus's discoveries in the New World, we have a holiday called Columbus Day. On this day we think about how Columbus forever changed life in North and South America.



Columbus Day, New York City



Think and Compare

1. What is this selection mostly about?
2. Do you think that Columbus's discoveries were important? Explain why or why not.
3. If you were an explorer, how would you travel—on land, on the sea, or in the air? Why?
4. Which of the places mentioned in this article are continents?

Test Strategy

On My Own
The answer is not in the selection. Use what you know to form your answer.

The Roof of the World

Mount Everest is called the "roof of the world." At 29,035 feet, it is the world's highest mountain. It is in the Himalayas, a mountain range in Asia.

Scientists figured out the height of Mount Everest in 1852. Soon many people wanted to climb to the top. It took 101 years for someone to reach that goal. On May 29, 1953, two people reached the "roof of the world." They were Edmund Hillary, from New Zealand, and Tenzing Norgay, a Sherpa climber from Nepal. Sherpas are people who live near Mount Everest.

Climbing Everest has many dangers. There are often avalanches, or snow slides. Climbers can fall into huge cracks in the mountain, called crevasses. Winds may blow at 125 miles per hour. Temperatures may be as cold as 40 degrees below zero. There is less oxygen in the air, making it hard to breathe. People usually climb to the peak only in May and October. Then they miss the winter snows and the summer rains.

Mount Everest

Go On

Directions: Answer the questions.

1. **Mount Everest is**

   A located in the United States.
   B the highest mountain in the world.
   C a good place for a winter vacation.
   D the only mountain in Asia.

2. **Where would an avalanche MOST LIKELY take place?**

   A on a beach
   B in a desert
   C on a mountain
   D in a rain forest

3. **What is the main idea of the second paragraph?**

   A Oxygen is thin at the top of the mountain.
   B Climbing Mount Everest is very hard.
   C Sherpas live near Mount Everest.
   D Hillary and Norgay reached the top first.

4. **Why do you think Mount Everest is called "the roof of the world"?**

5. **Would you ever try to do something difficult like climb Mount Everest? Explain why or why not.**

Tip

Use what you know.

STOP

Write to a Prompt

The first people to climb Mount Everest did something very hard and dangerous. Write a paragraph comparing what they did to going to the moon for the first time. Use details from the article to support your answer.

I made sure that my ideas are clear and organized.

Being First

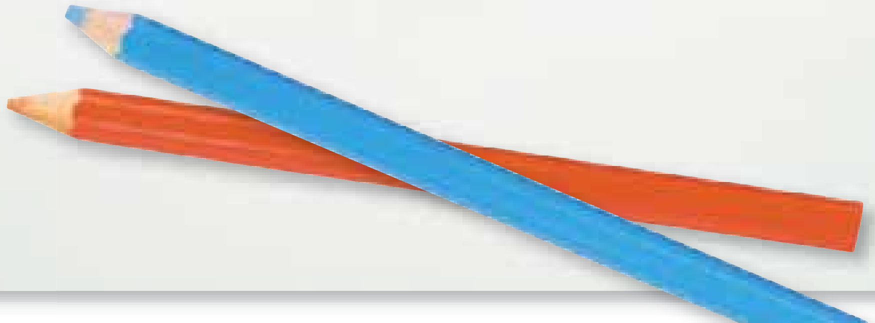
Being the first to climb to the top of Mount Everest is a lot like the first trip to the moon. The first trip to the moon was very dangerous. So was climbing to the highest place in the world. The astronauts had to ride into space on a rocket. There is no air in space. The astronauts had to take it with them. It is hard to breathe on Mount Everest. Some climbers bring along oxygen to help them breathe. The astronauts had to use special equipment in space. Mountain climbers have to use special climbing tools.

Your Writing Prompt

Climbing to the top of Mount Everest is very hard and dangerous. Why do people do it? Write a paragraph about why you think people set goals that are very hard to reach. Use details from the article to support your answer.

Writer's Checklist

- ☑ Think about your purpose for writing.
- ☑ Plan your writing before beginning.
- ☑ Use details to support your ideas.
- ☑ Use your best spelling, grammar, and punctuation.



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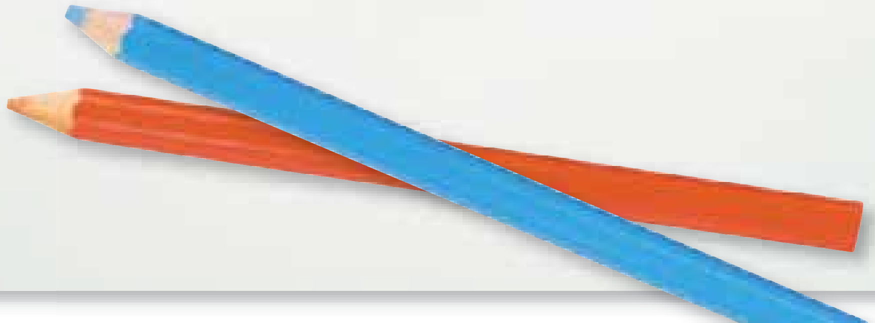
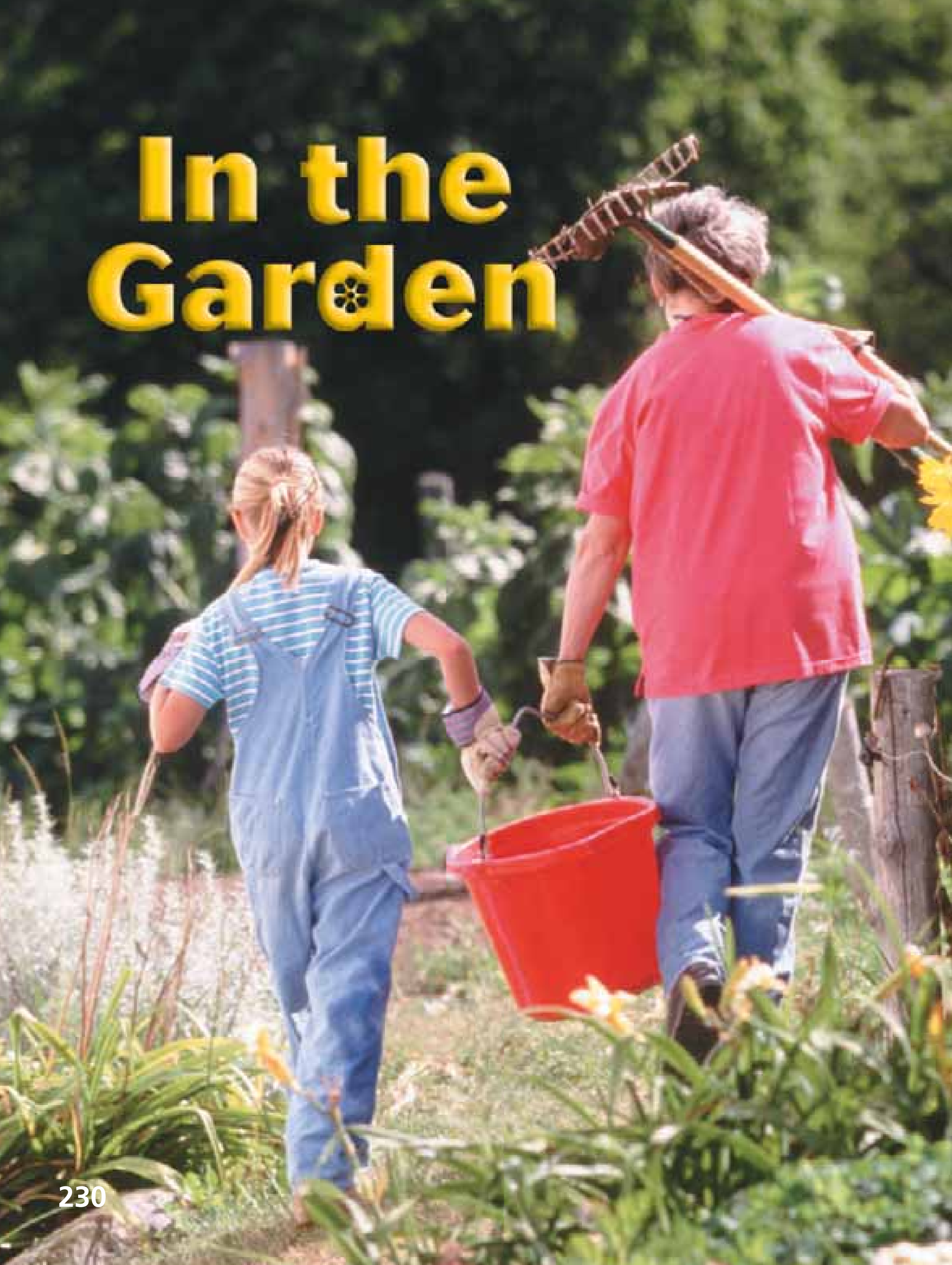


In the Garden



Talk About It

Why do people grow gardens? What is needed to grow a garden?

LOG ON Find out more about gardens at **www.macmillanmh.com**

Vocabulary

scent
trade
muscles
prickly
blooming
aroma

Context Clues
Homophones are words that sound the same but have different spellings and different meanings.

Scent and *cent* are homophones.

Scent means smell. A *cent* is money.

City Garden

by Roberto Salazar

When we lived in the country, Dad and I had a garden. We planted beans, peas, and other vegetables. To us, the **scent** of moist soil and growing plants was a kind of perfume. We loved the earthy smell.

Then we moved to the city. We had to **trade** our big country garden for a small city window box.

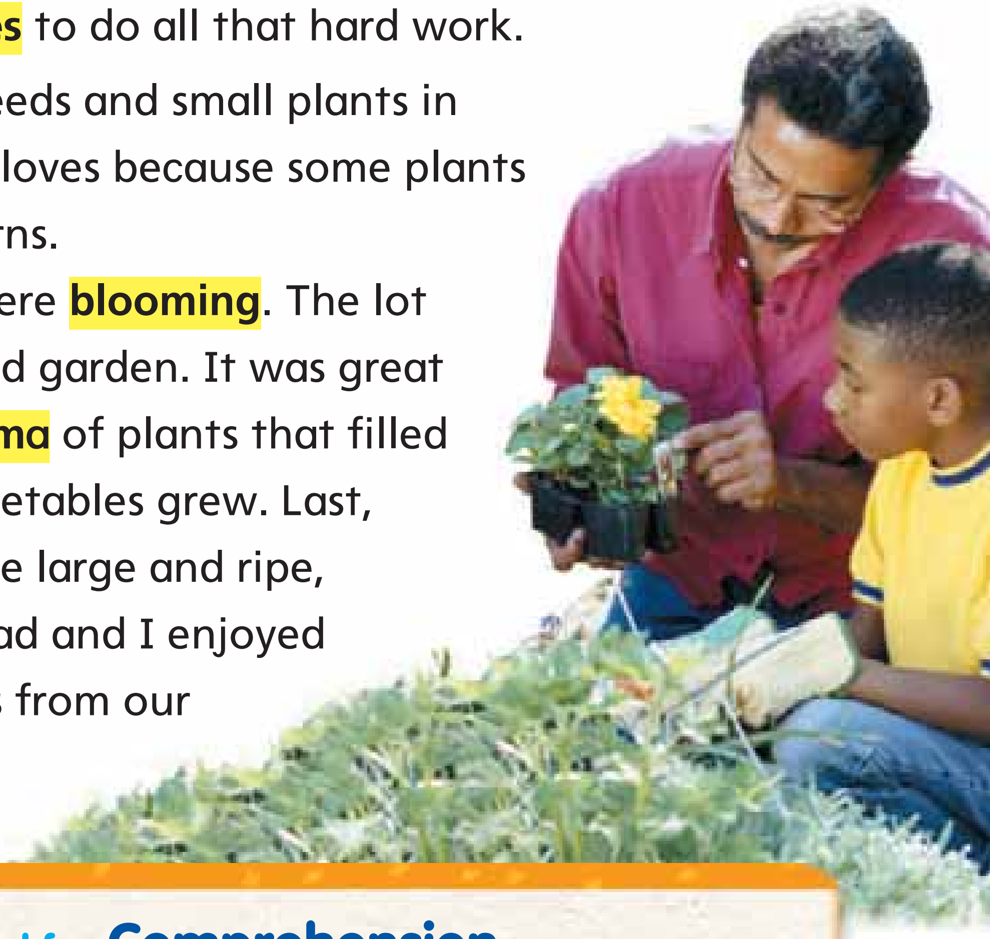
Cauliflowers

Dad and I missed the garden. So he offered to help my class plant a garden in an empty lot.

First, my class dug up the soil in the lot. We needed strong **muscles** to do all that hard work.

Next, we planted seeds and small plants in neat rows. We wore gloves because some plants had sharp **prickly** thorns.

Soon the flowers were **blooming**. The lot reminded me of my old garden. It was great to smell the fresh **aroma** of plants that filled the air. Then, tiny vegetables grew. Last, the vegetables became large and ripe, so we picked them. Dad and I enjoyed some tasty vegetables from our city garden.

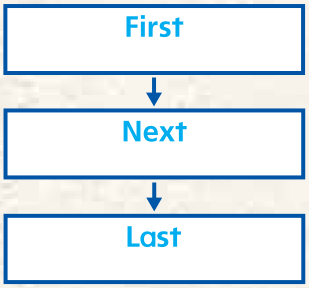


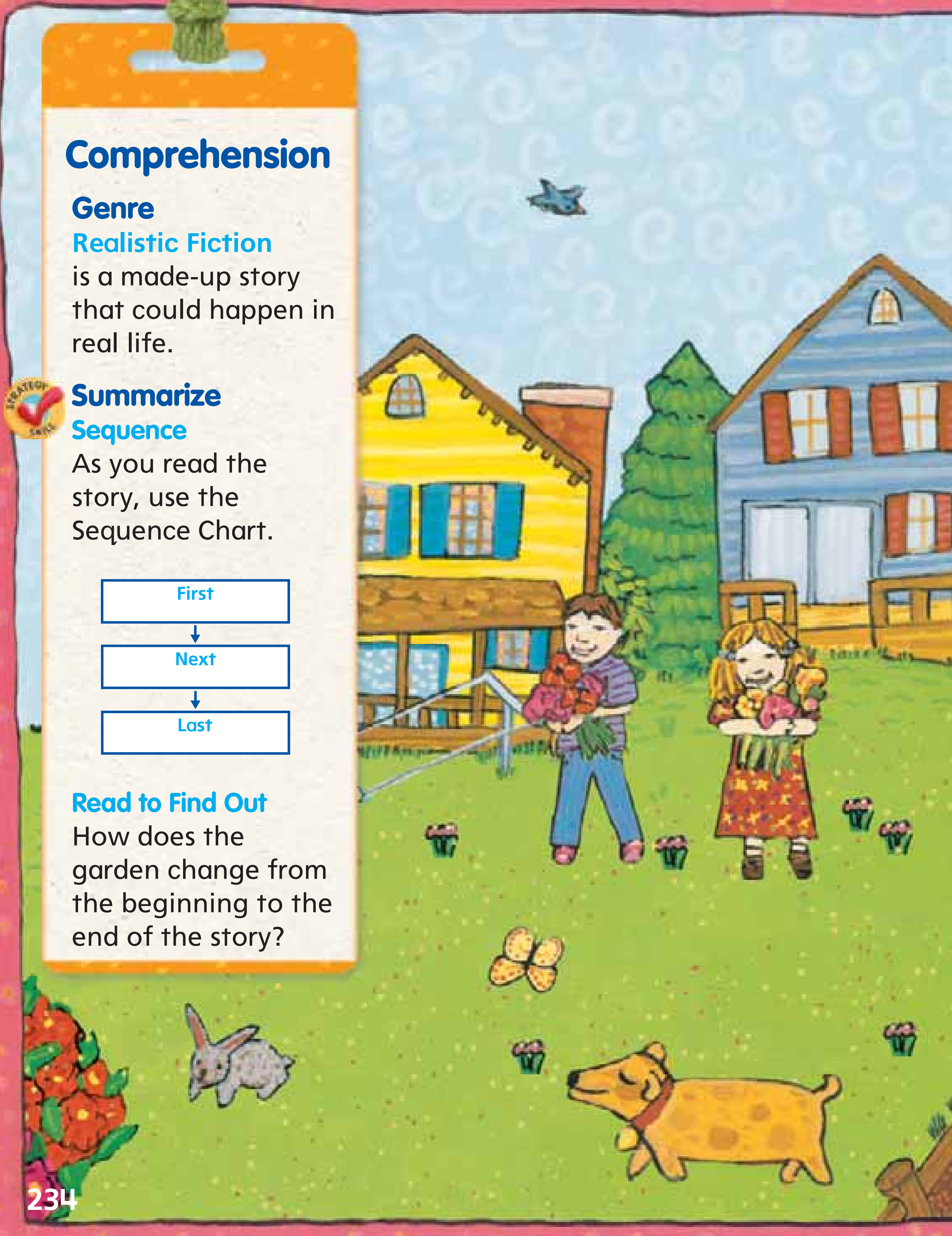
Reread for Comprehension

Summarize

Sequence

You can summarize an article by explaining the sequence, or order, of the important events you read about. Reread the article and use the chart to understand what happens first, next, and last in the article.





Comprehension

Genre

Realistic Fiction
is a made-up story that could happen in real life.

Summarize

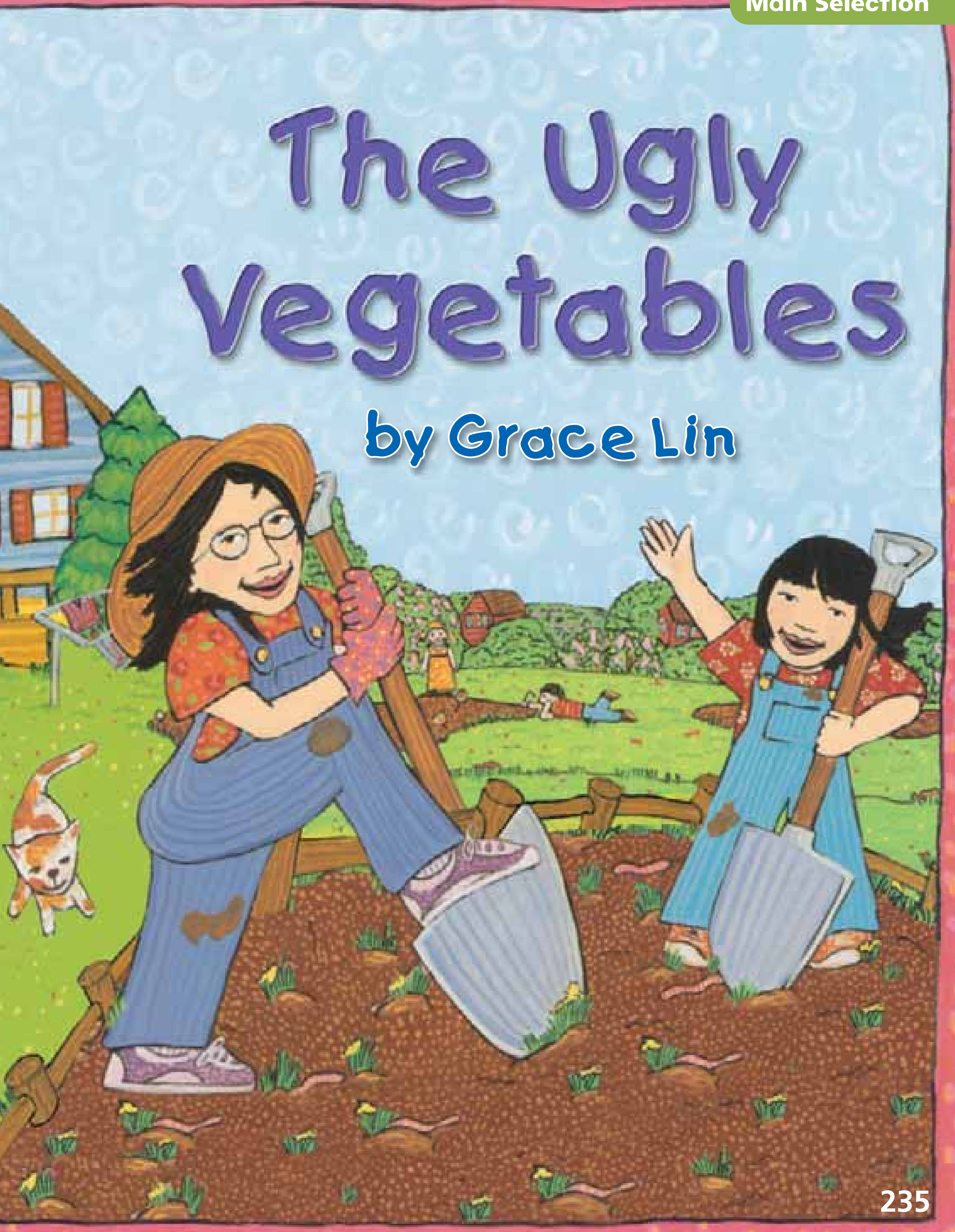
Sequence
As you read the story, use the Sequence Chart.

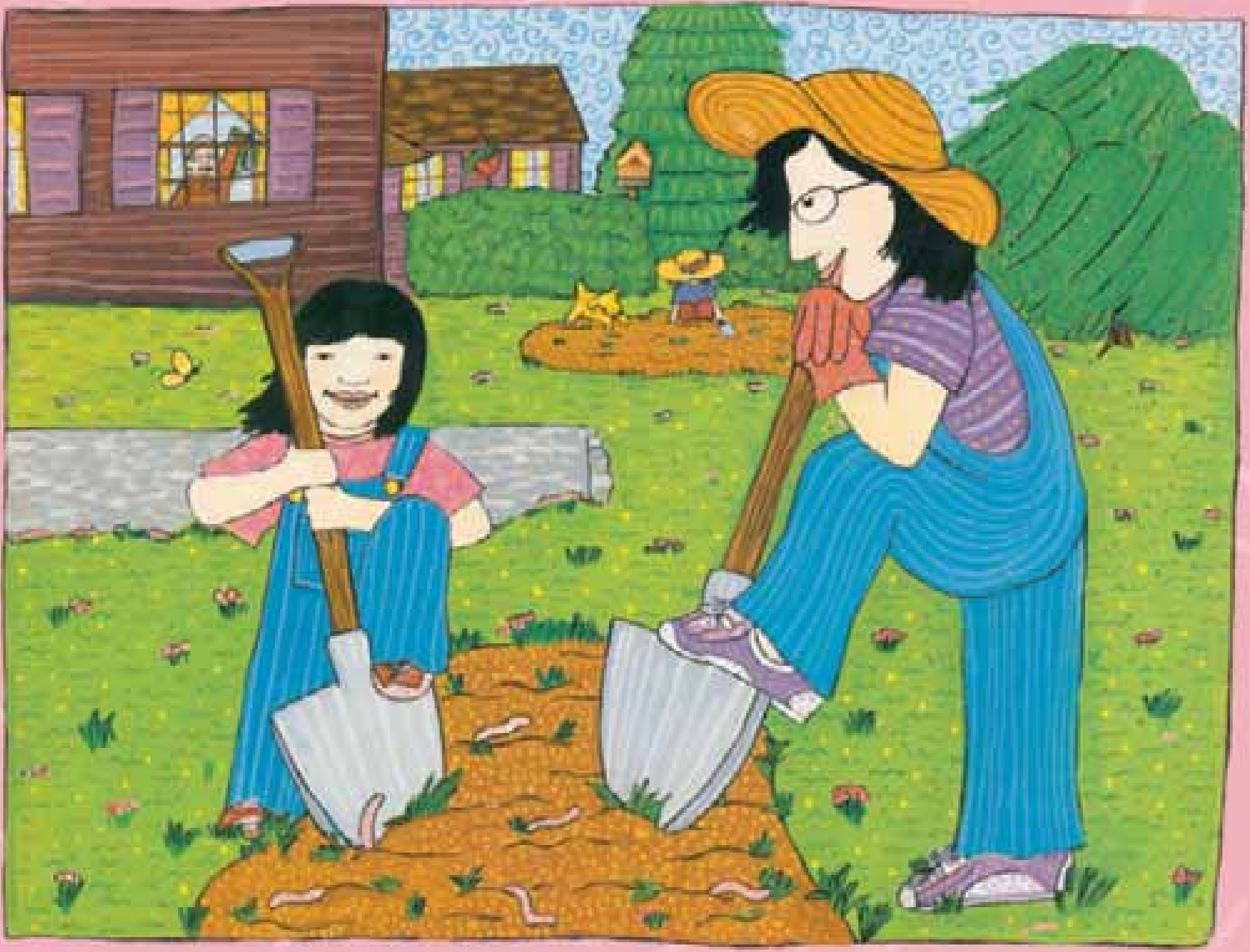
First
↓
Next
↓
Last

Read to Find Out
How does the garden change from the beginning to the end of the story?

The Ugly Vegetables

by Grace Lin



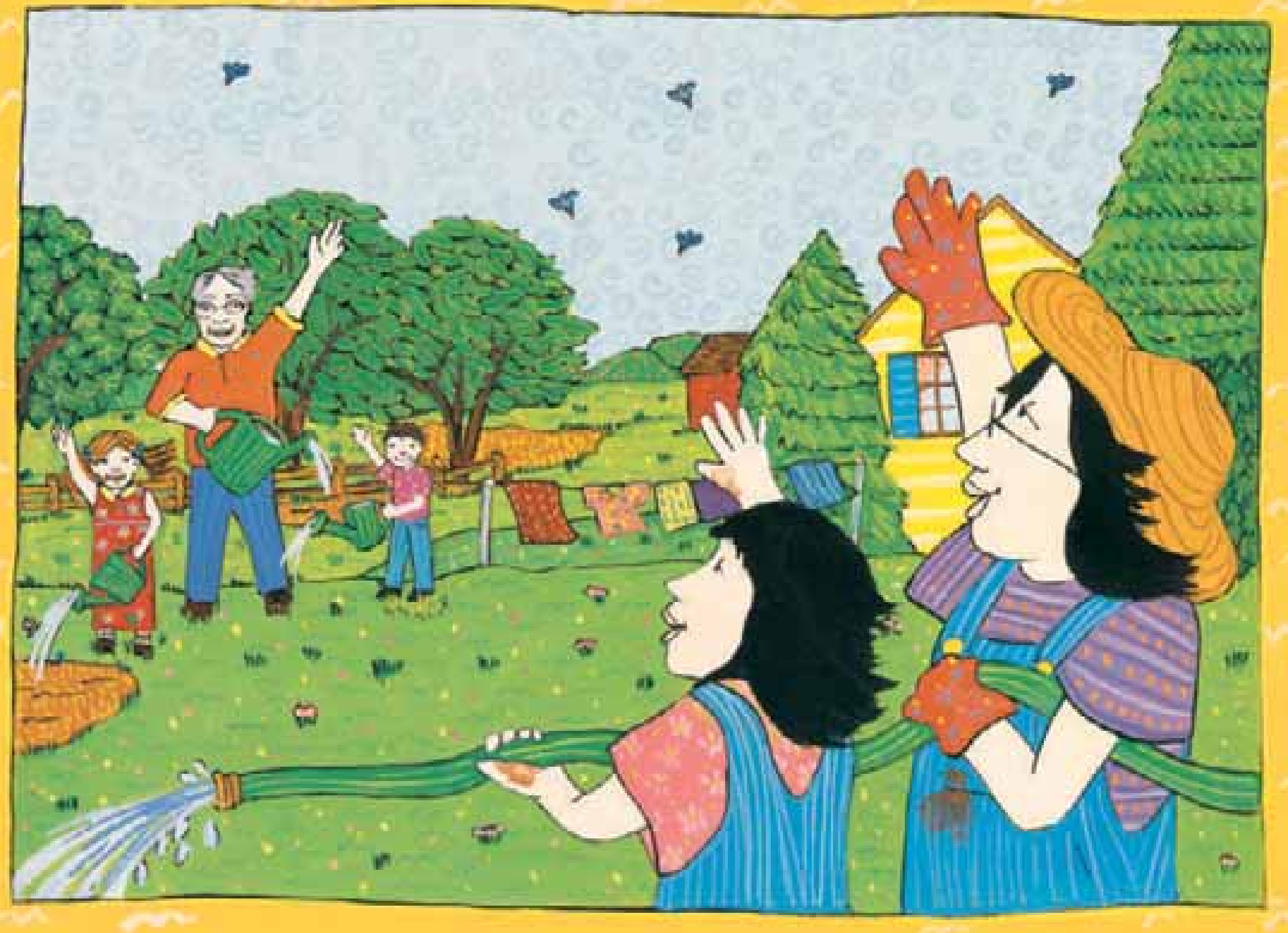


In the spring I helped my mother start our garden. We used tall shovels to turn the grass upside down, and I saw pink worms wriggle around. It was hard work. When we stopped to rest, we saw that the neighbors were starting their gardens too.

"Hello, Irma!" my mother called to Mrs. Crumerine. Mrs. Crumerine was digging too. She was using a small shovel, one that fit in her hand.

"Mommy," I asked, "why are we using such big shovels? Mrs. Crumerine has a small one."

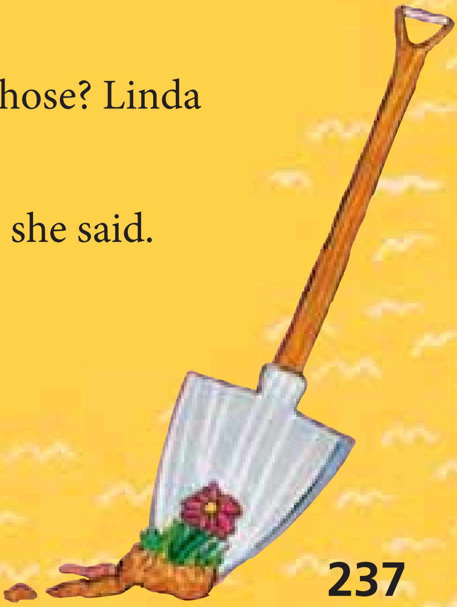
"Because our garden needs more digging," she said.

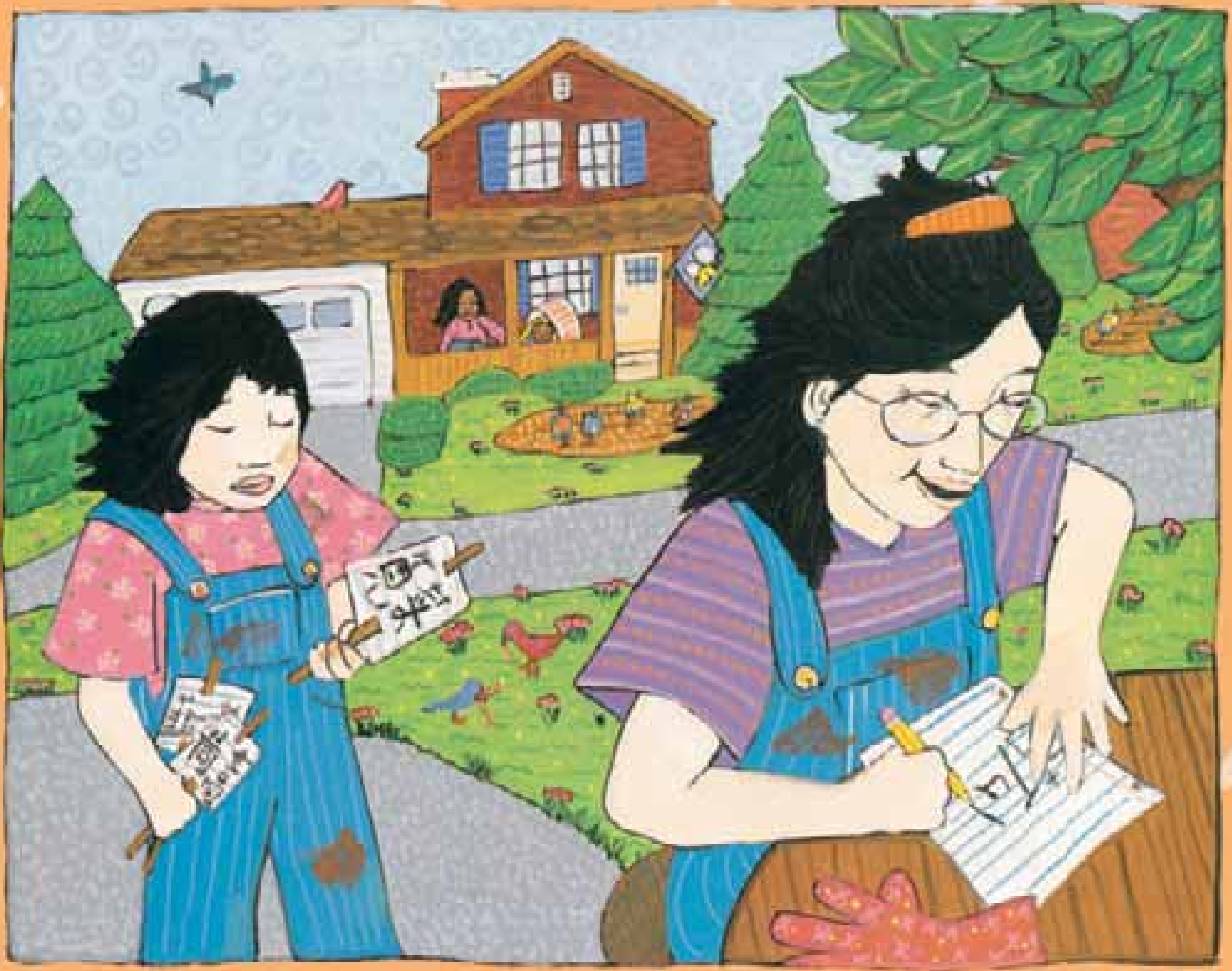


I helped my mother plant the seeds, and we dragged the hose to the garden. “Hi, Linda! Hi, Mickey!” I called to the Fitzgeralds. They were sprinkling water on their garden with green watering cans.

“Mommy,” I asked, “why are we using a hose? Linda and Mickey use watering cans.”

“Because our garden needs more water,” she said.



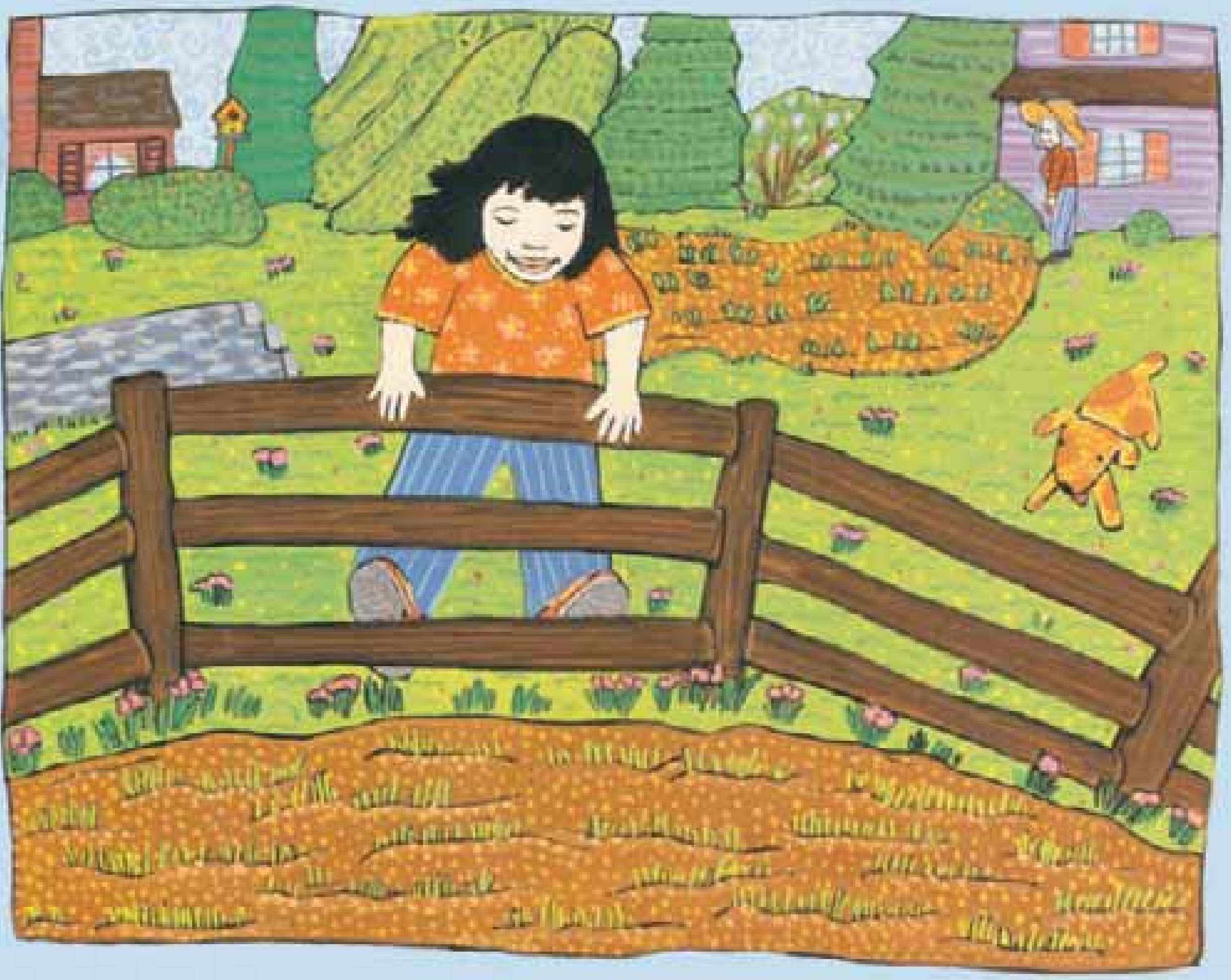


Then my mother drew funny pictures on pieces of paper, and I stuck them into the garden.

“Hello, Roseanne!” my mother called across the street to Mrs. Angelhowe.

“Mommy,” I asked, “why are we sticking these papers in the garden? Mrs. Angelhowe has seed packages in her garden.”

“Because our garden is going to grow Chinese vegetables,” she told me. “These are the names of the vegetables in Chinese, so I can tell which plants are growing where.”



One day I saw our garden growing. Little green stems that looked like grass had popped out from the ground.

"Our garden's growing!" I yelled. "Our garden's growing!"

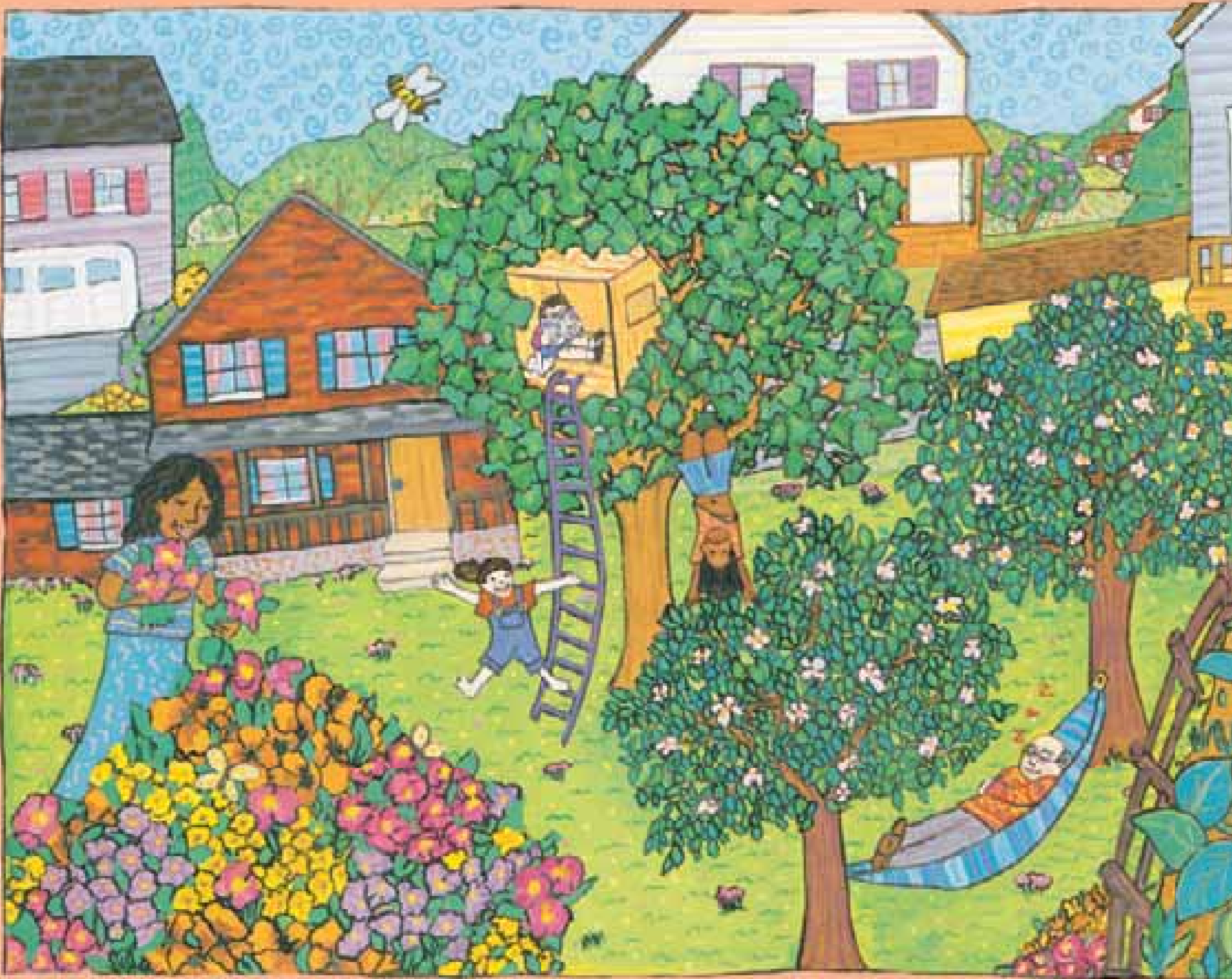
I rushed over to the neighbors' gardens to see if theirs had grown. Their plants looked like little leaves.

"Mommy," I asked, "why do our plants look like grass? The neighbors' plants look different."

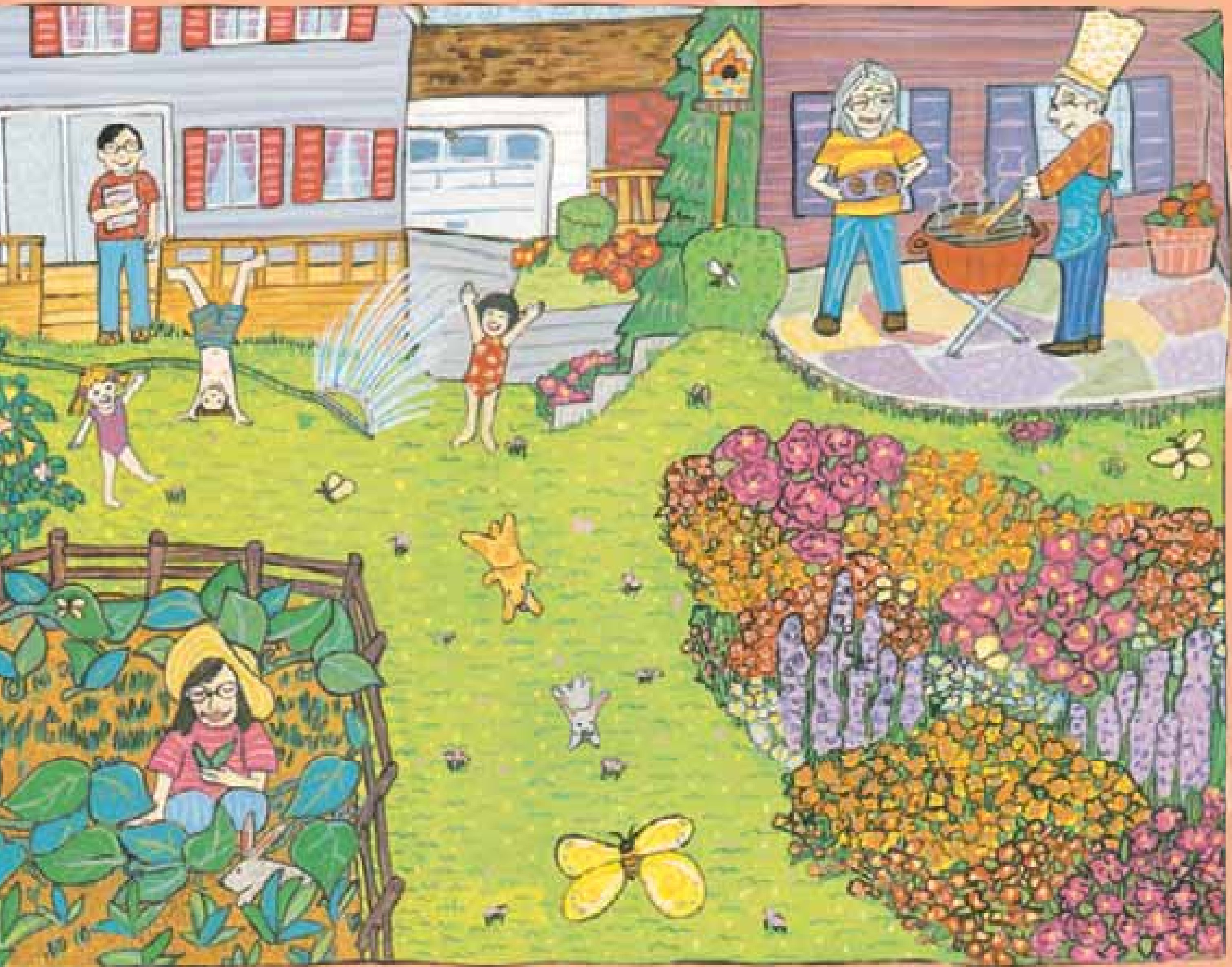
"Because they are growing flowers," she said.

"Why can't we grow flowers?" I asked.

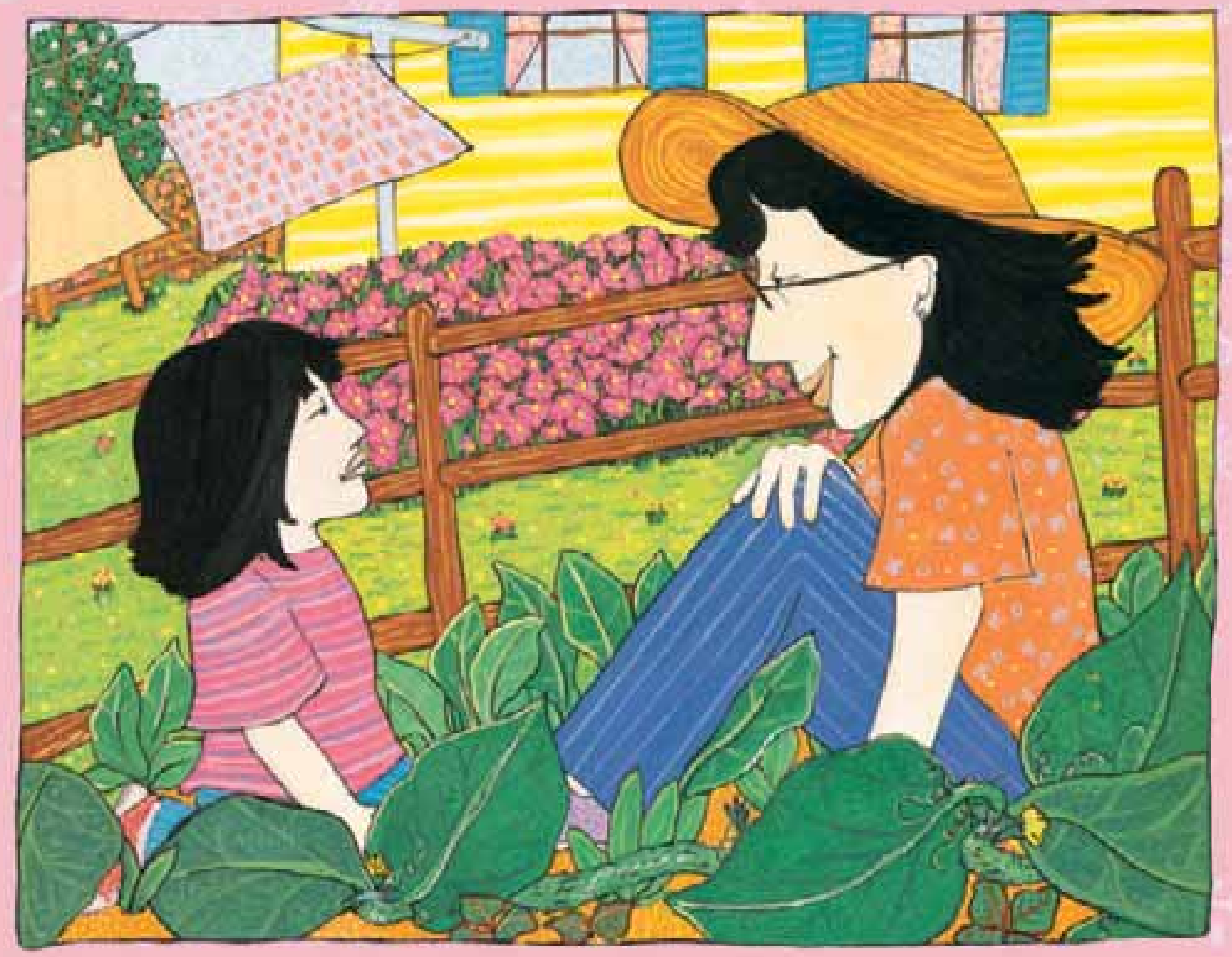
"These are better than flowers," she said.



Soon all the neighbors' gardens were **blooming**.
Up and down the street grew rainbows of flowers.



The wind always smelled sweet, and butterflies and bees flew everywhere. Everyone's garden was beautiful, except for ours.



Ours was all dark green and ugly.

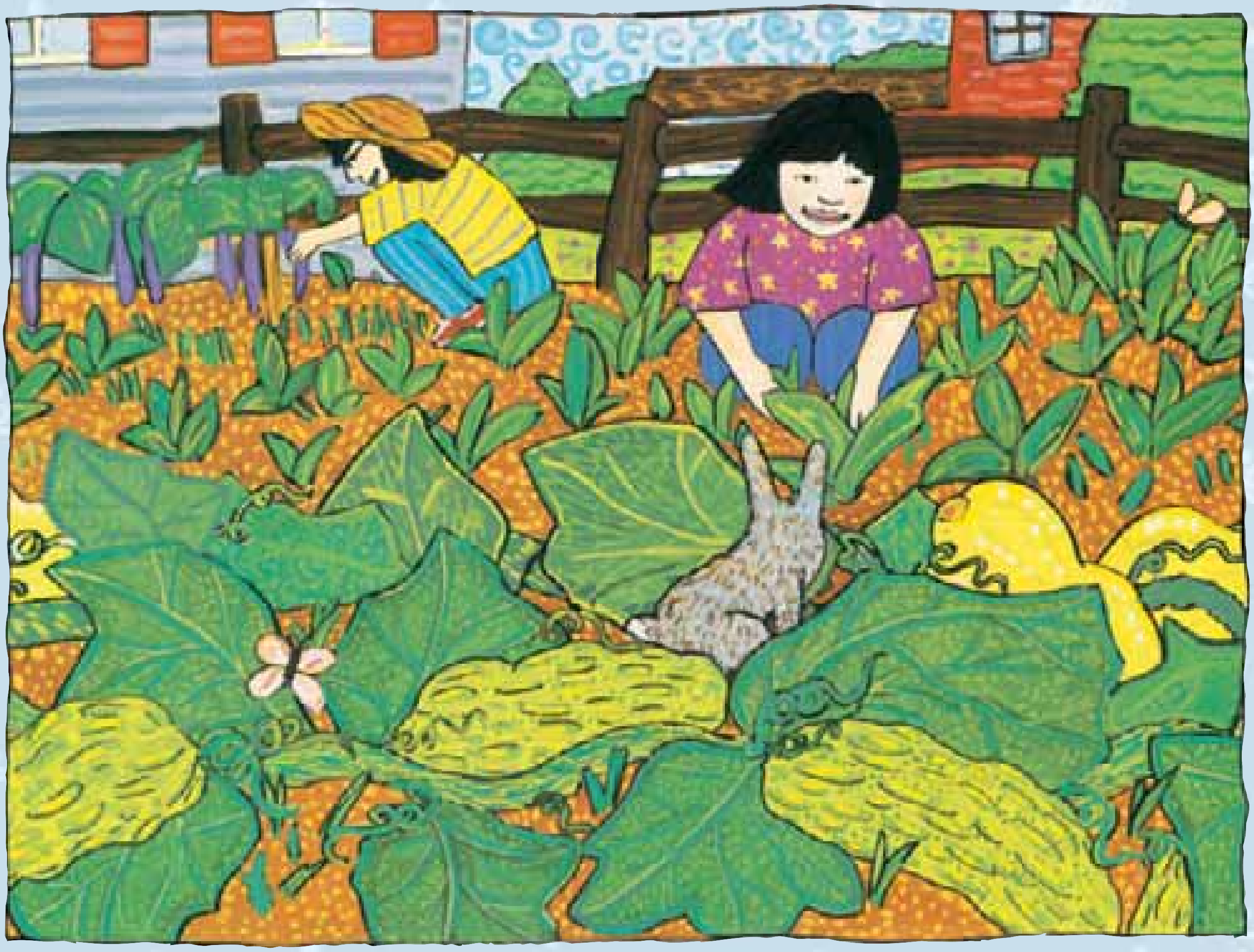
"Why didn't we grow flowers?" I asked again.

"These are better than flowers," Mommy said again.

I looked, but saw only black-purple-green vines, fuzzy wrinkled leaves, **prickly** stems, and a few little yellow flowers.

"I don't think so," I said.

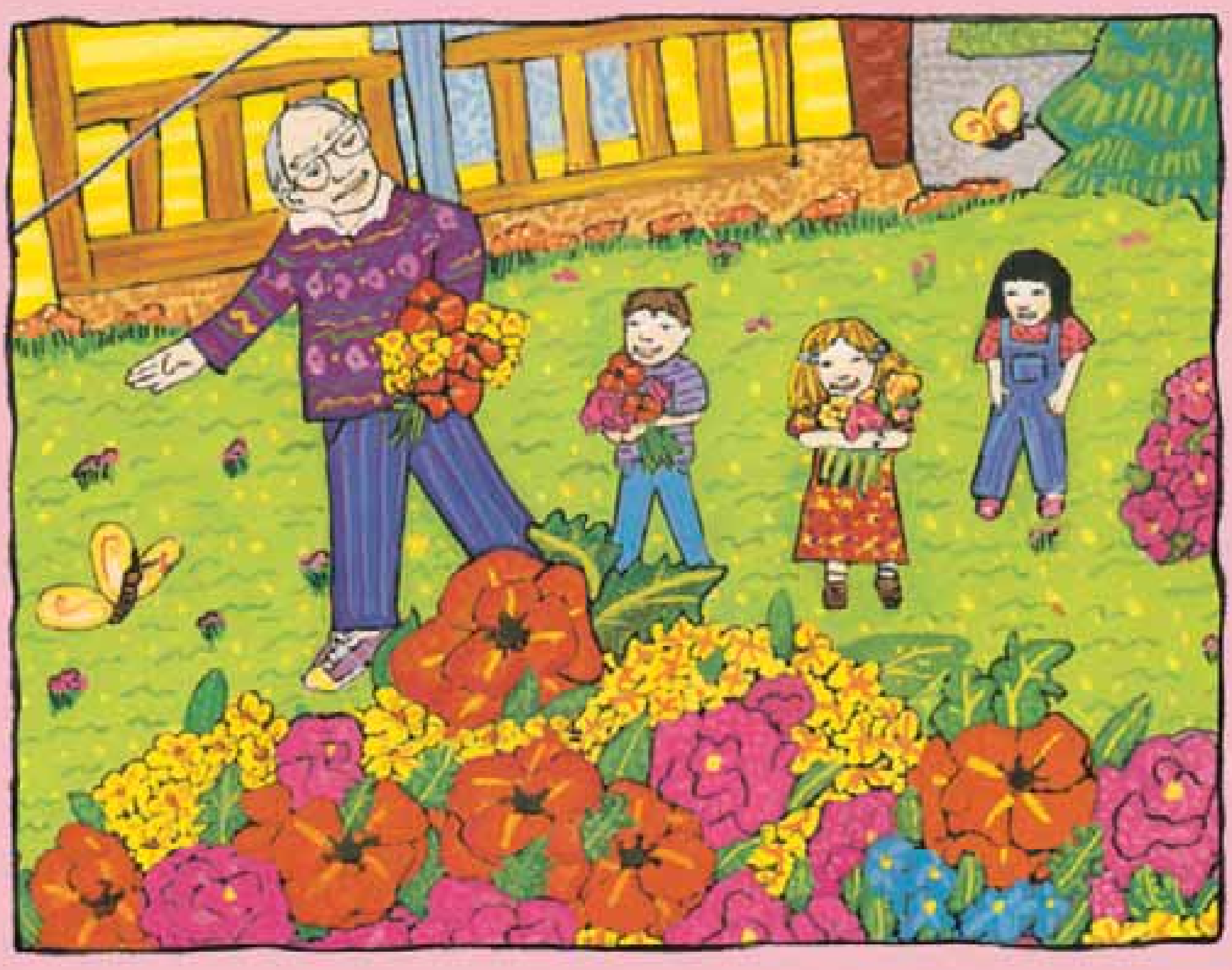
"You wait and see," Mommy said.



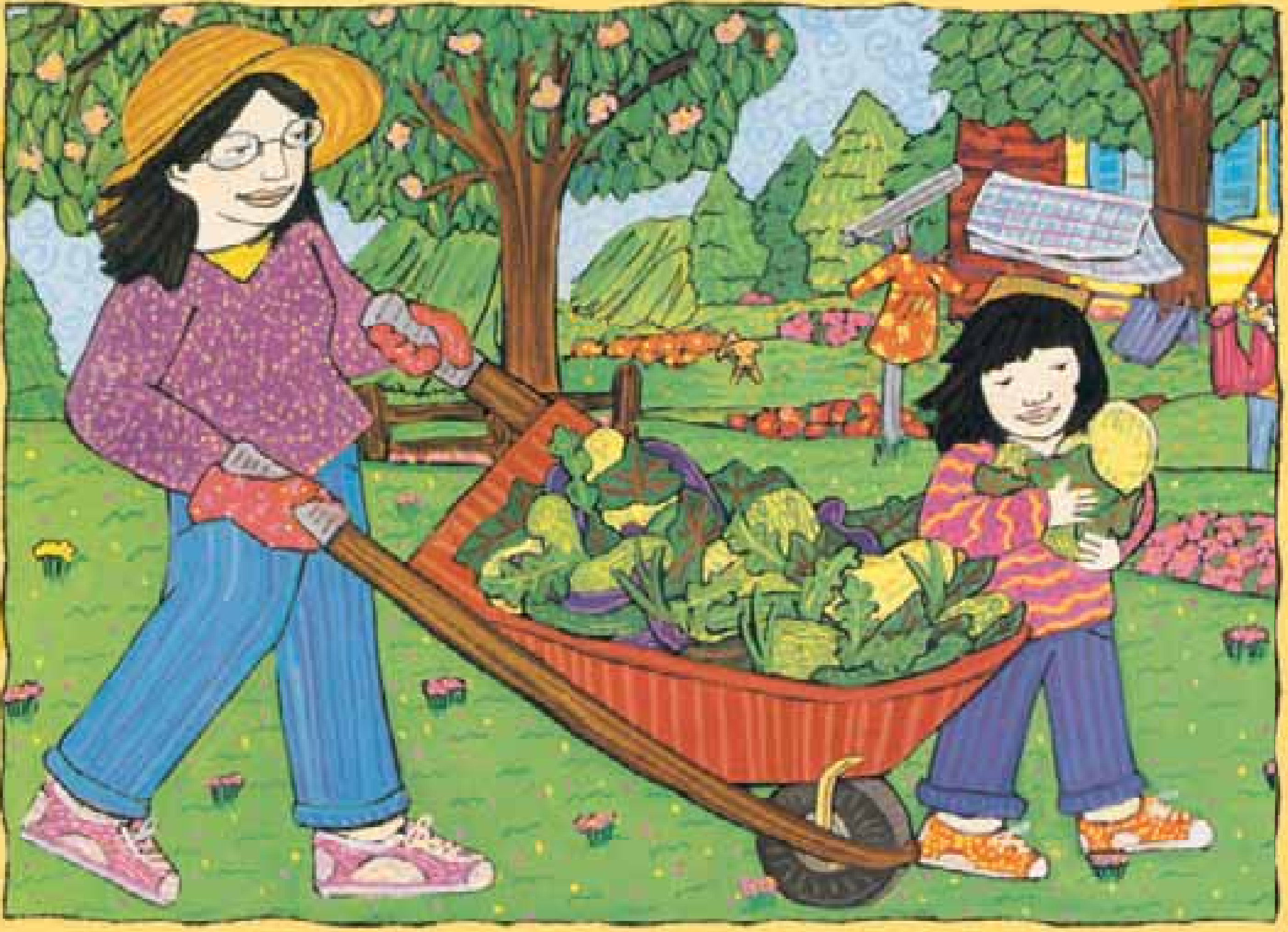
Before long, our vegetables grew. Some were big and lumpy. Some were thin and green and covered with bumps. Some were just plain icky yellow. They were ugly vegetables.

Sequence

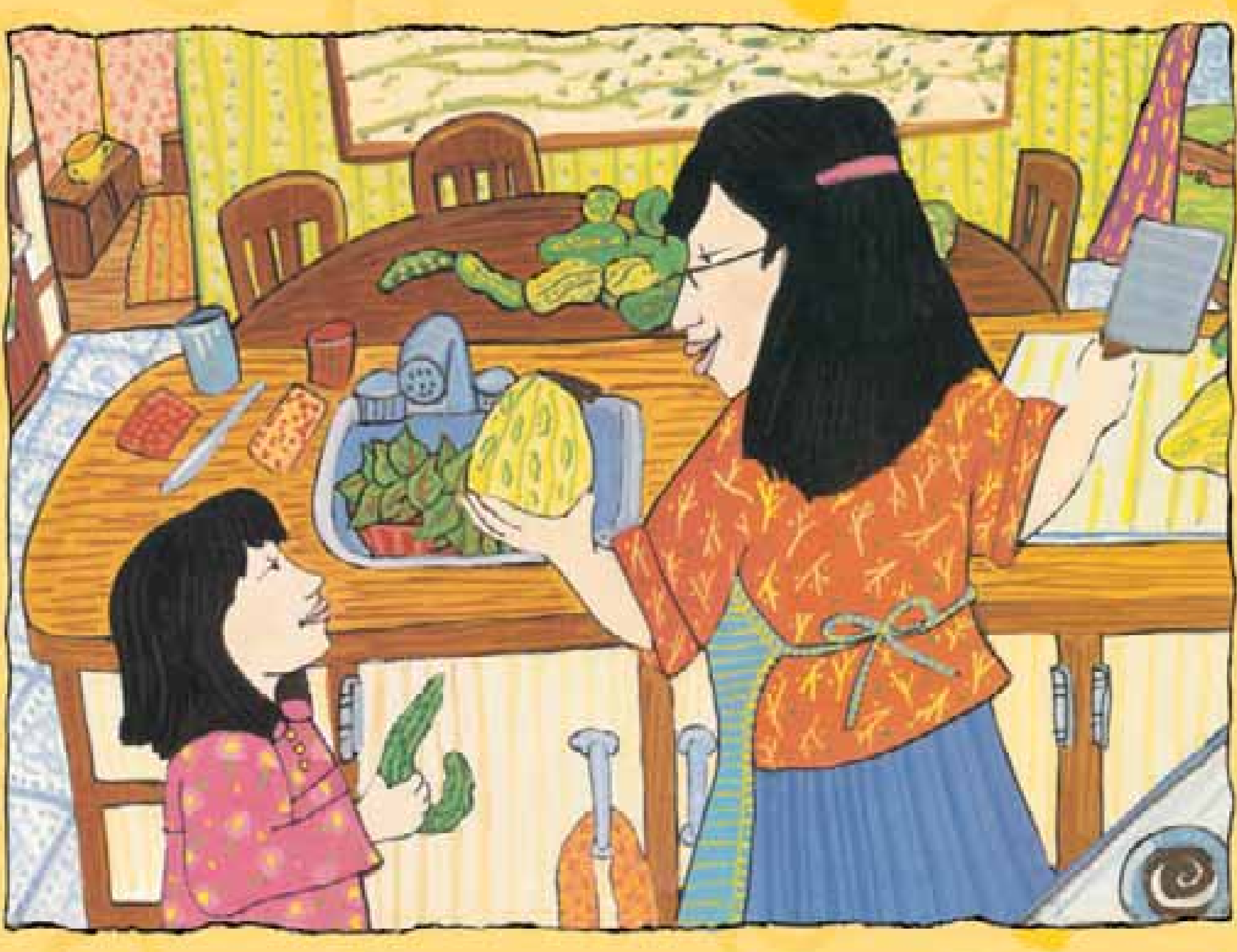
Describe how the garden changes from the beginning of the story until this point.



Sometimes I would go over to the neighbors' and look at their pretty gardens. They would show the poppies and peonies and petunias to me, and I would feel sad that our garden wasn't as nice.



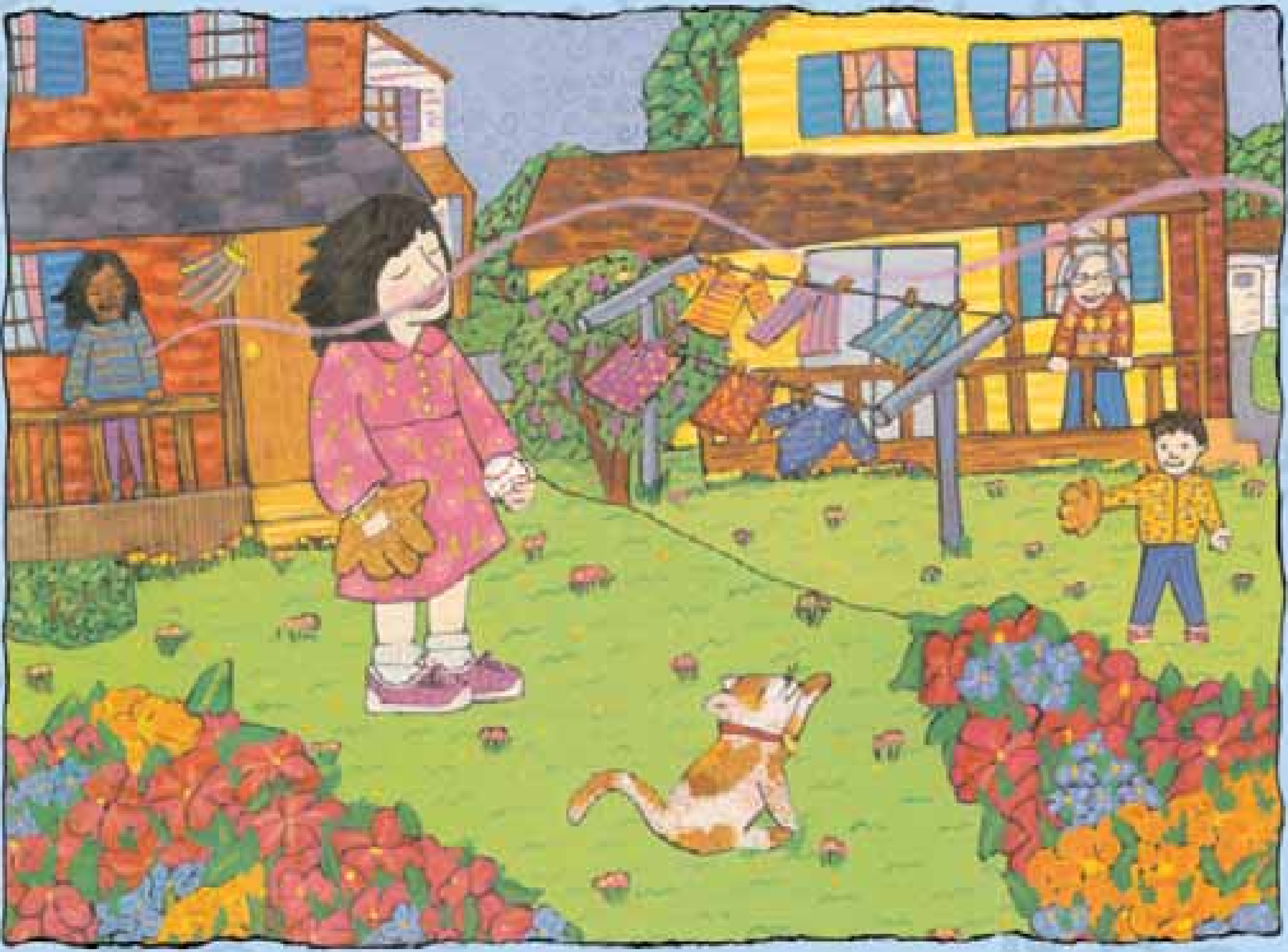
One day my mother and I picked the vegetables from the garden. We filled a whole wheelbarrow full of them. We wheeled them to the kitchen. My mother washed them and took a big knife and started to chop them.



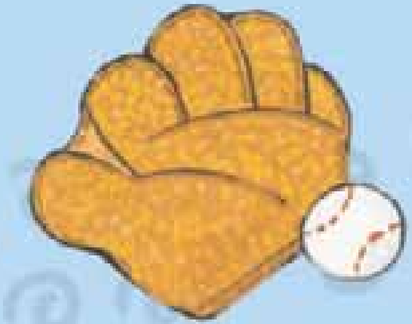
“Aie-yow!” she said when she cut them. She had to use all her **muscles**. The vegetables were hard and tough.

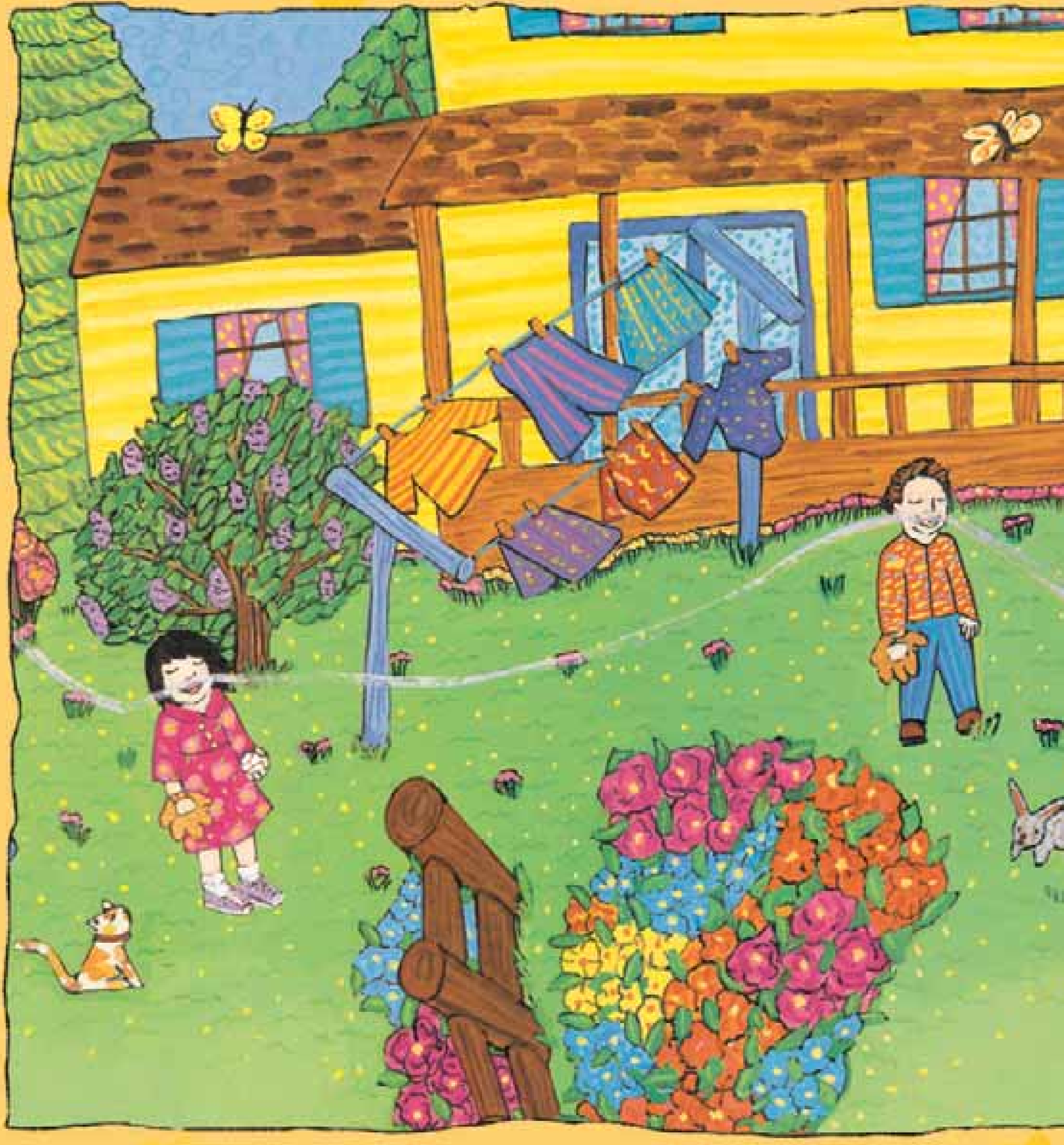
“This is a sheau hwang gua,” Mommy said, handing me a bumpy, curled vegetable. She pointed at the other vegetables. “This is shiann tsay. That’s a torng hau.”

Sequence
What steps does the girl’s mother take to prepare the vegetables?

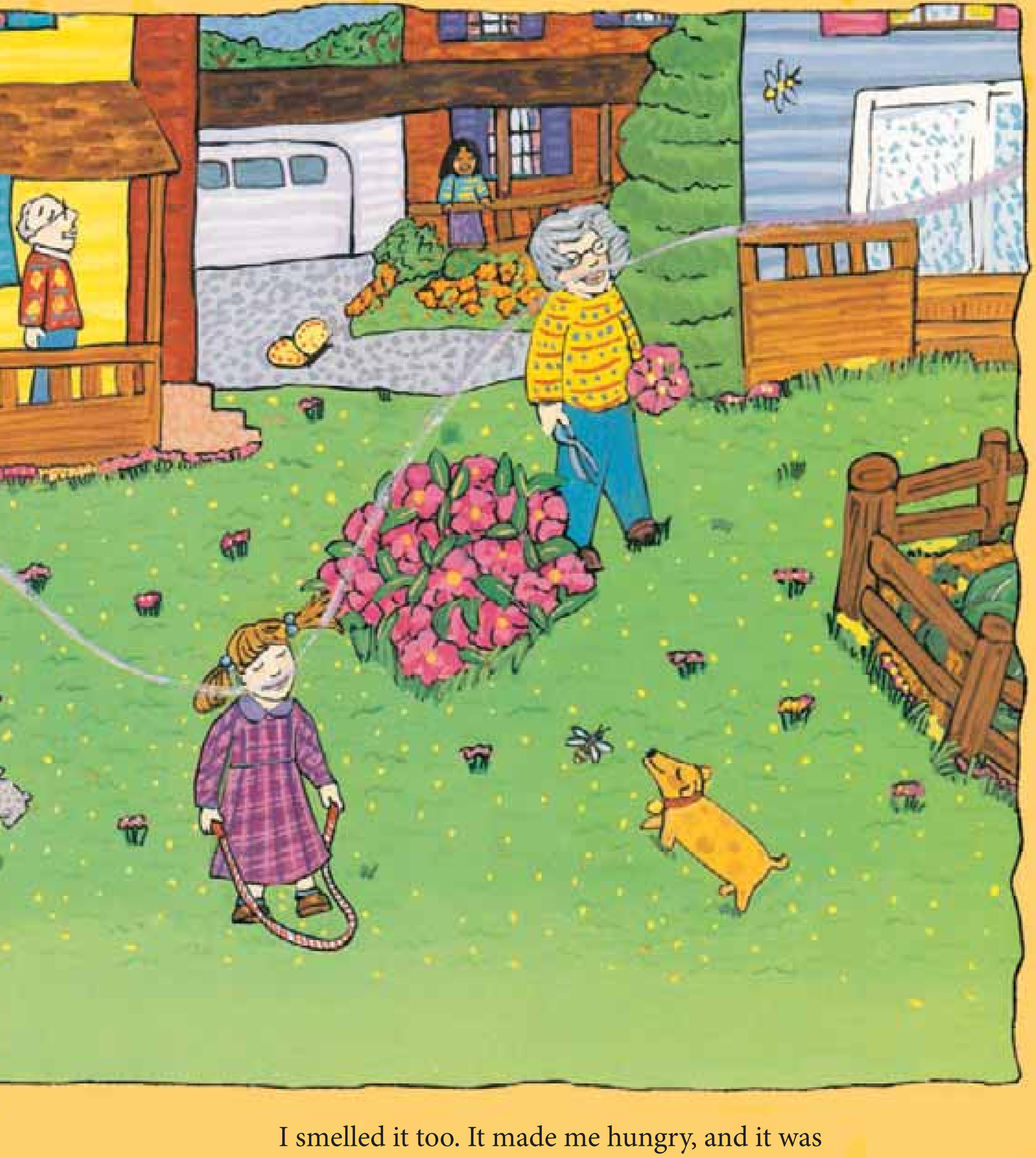


I went outside to play. While I was playing catch with Mickey, a magical **aroma** filled the air. I saw the neighbors standing on their porches with their eyes closed, smelling the sky. They took deep breaths of air, like they were trying to eat the smell.





The wind carried it up and down the street. Even the bees and the butterflies seemed to smell the **scent** in the breeze.



I smelled it too. It made me hungry, and it was coming from my house!

When I followed it to my house, my mother was putting a big bowl of soup on the table. The soup was yellow and red and green and pink.

"This is a special soup," Mommy said, and she smiled.

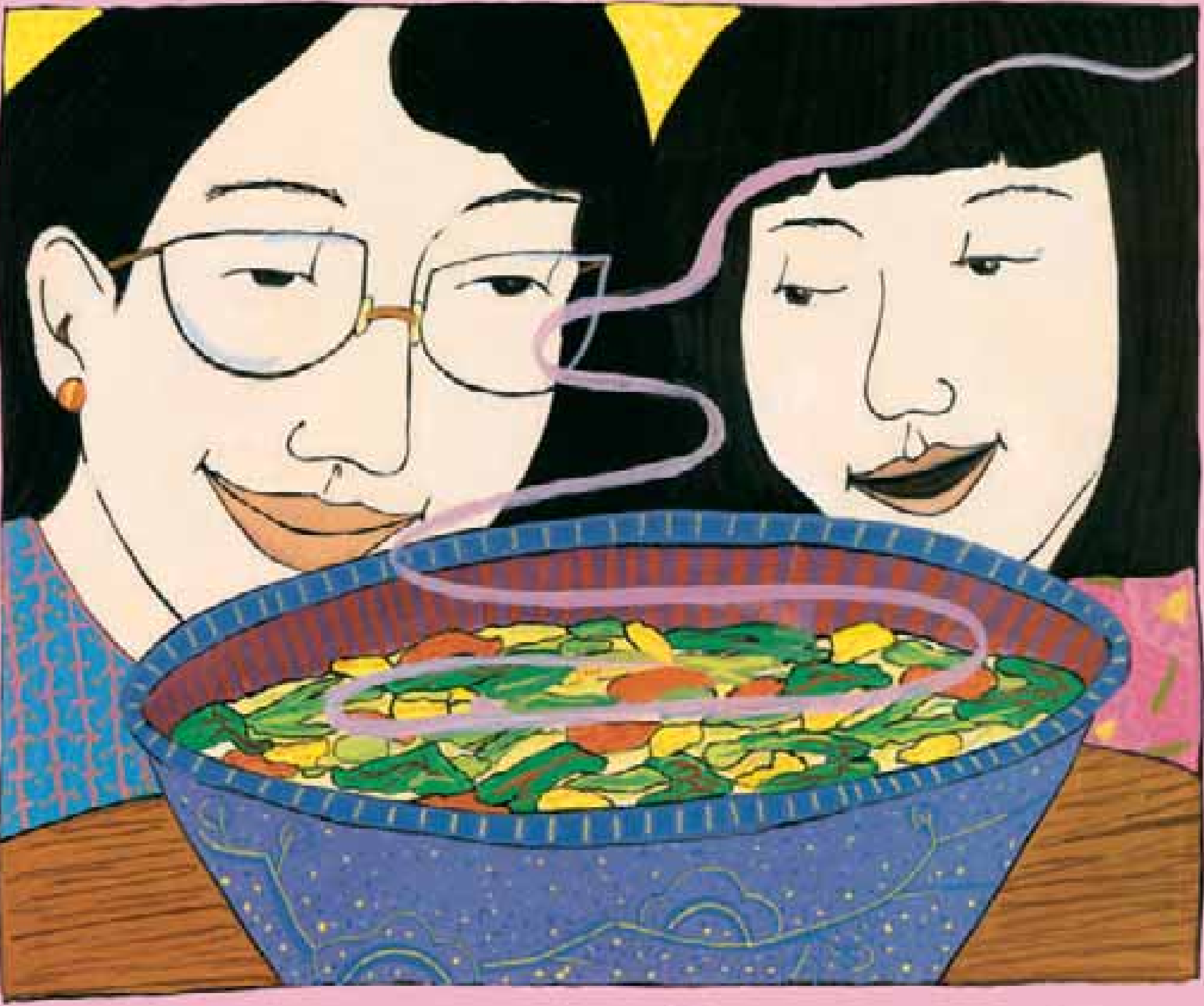
She gave me a small bowl full of it and I tasted it. It was so good! The flavors of the soup seemed to dance in my mouth and laugh all the way down to my stomach. I smiled.

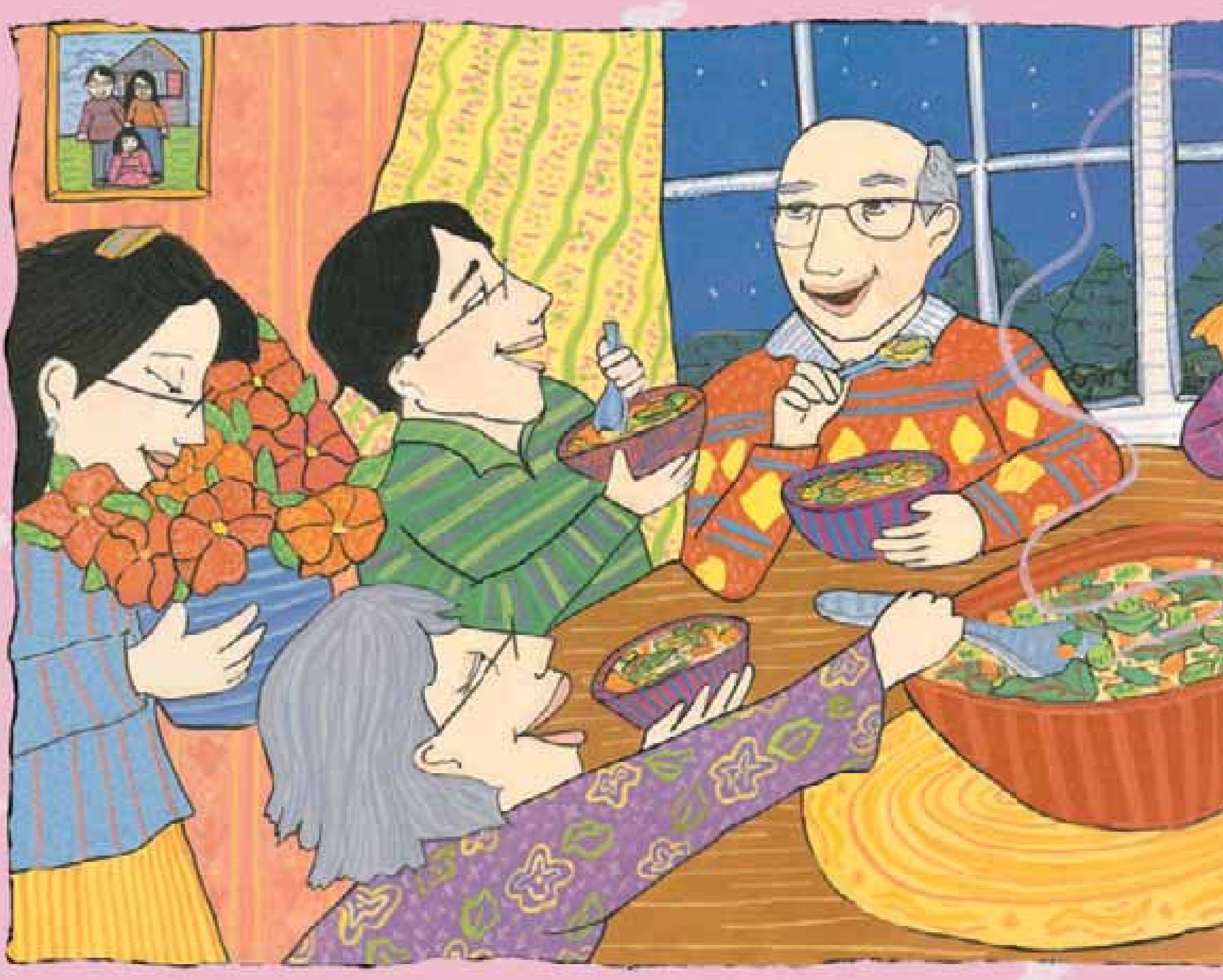
"Do you like it?" Mommy asked me.

I nodded and held out my bowl for some more.

"It's made from our vegetables," she told me.

Then the doorbell rang, and we ran to open the door.

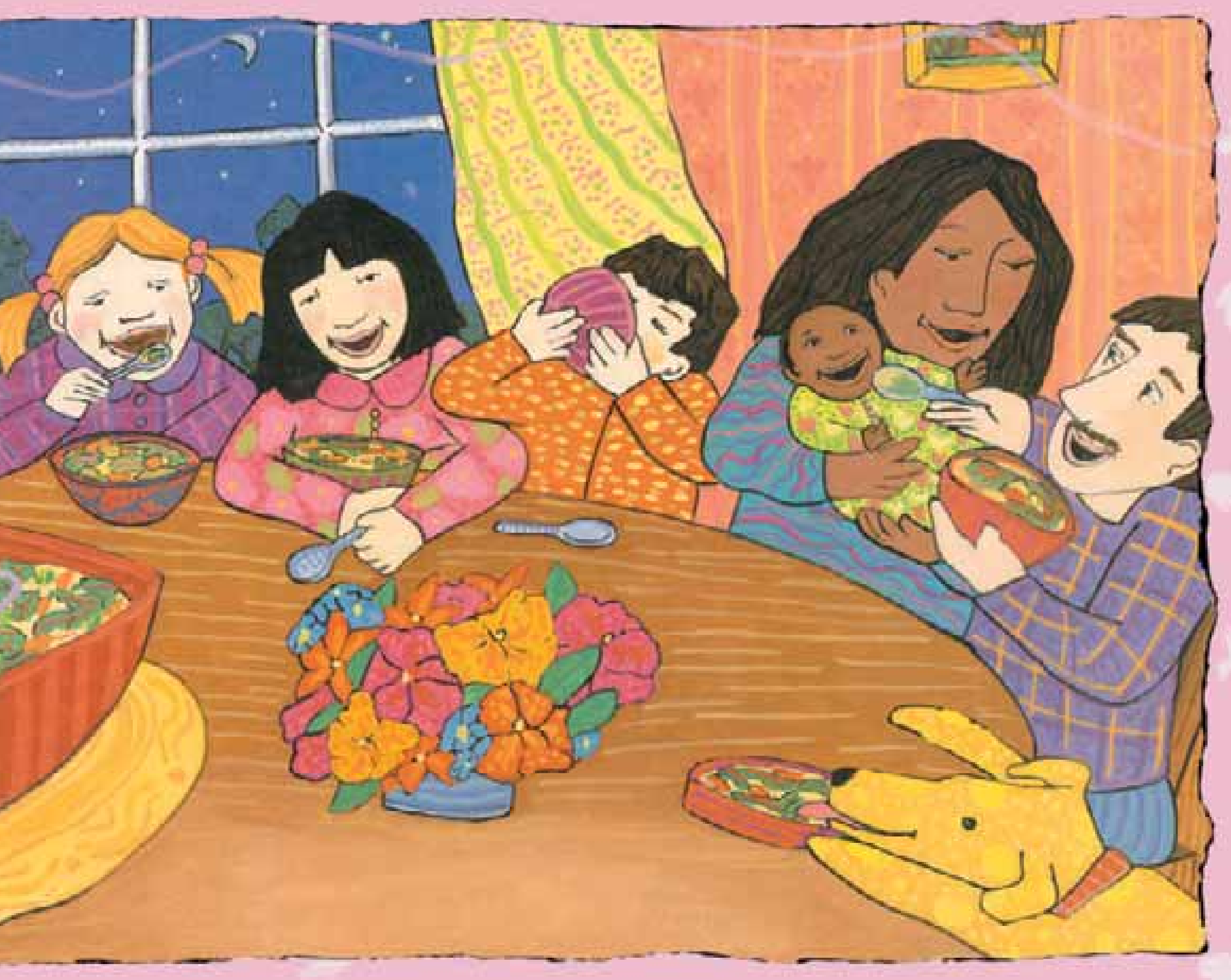




All our neighbors were standing at the door holding flowers.

“We noticed you were cooking.” Mr. Fitzgerald laughed as he held out his flowers. “And we thought maybe you might be interested in a **trade**!”

We laughed too, and my mother gave them each their own bowl of her special soup.

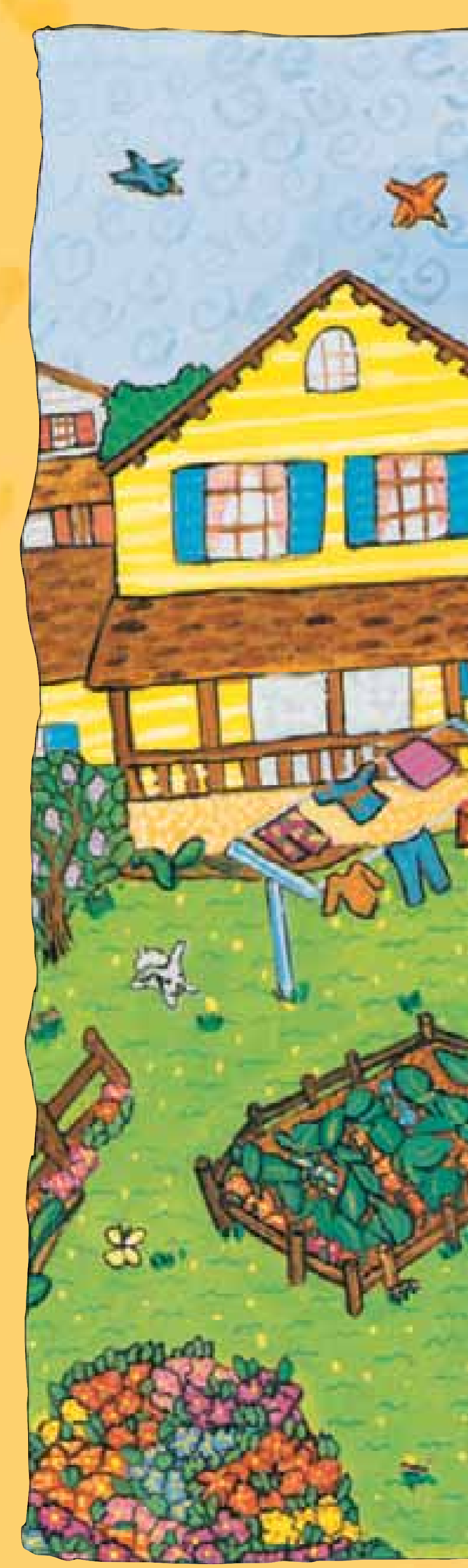


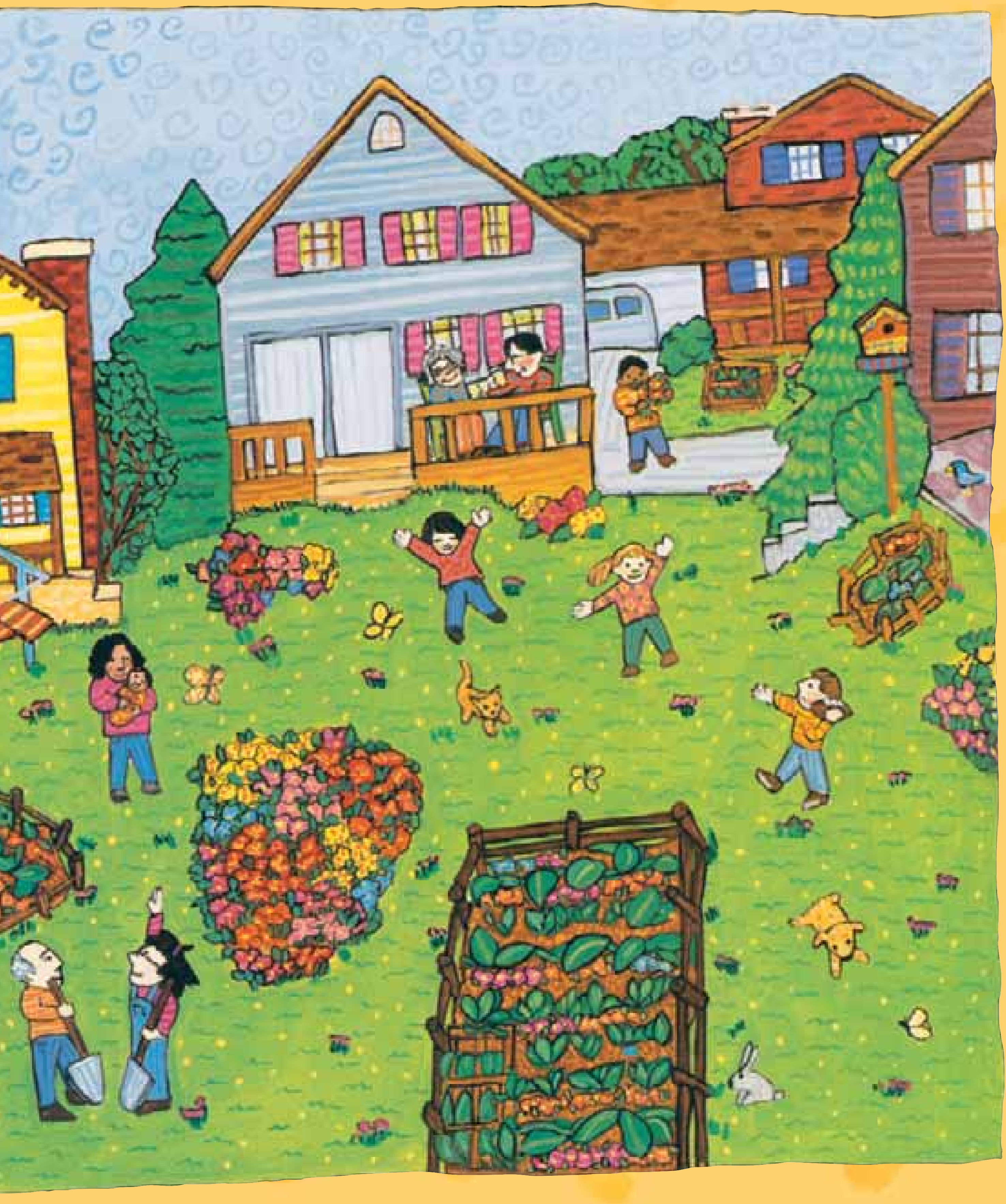
My mother told them what each vegetable was and how she grew it. She gave them the soup recipe and put some soup into jars for them to take home. I ate five bowls of soup.

It was the best dinner ever.

The next spring, when my mother was starting her garden, we planted some flowers next to the Chinese vegetables. Mrs. Crumerine, the Fitzgeralds, and the Angelhowes planted some Chinese vegetables next to their flowers.

Soon the whole neighborhood was growing Chinese vegetables in their gardens. Up and down the street, little green plants poked out of the ground. Some looked like leaves and some looked like grass, and when the flowers started blooming, you could smell soup in the air.

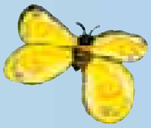




In the Garden with Grace Lin

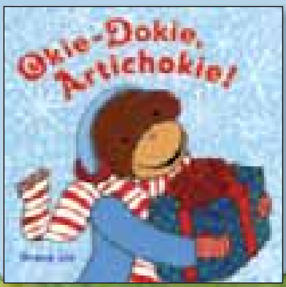
As a girl, **Grace Lin** wanted to be an ice skater. She drew many pictures of herself skating. But when Grace tried to skate, she often fell on her face. Then she looked at the pictures she had drawn. “Maybe I’ll be an artist,” Grace thought.

Grace says that *The Ugly Vegetables* is based on her childhood. “My mother used to grow Chinese vegetables in her garden while all the neighbors grew flowers. Year after year, I looked with disgust at our ugly garden and asked, ‘Why can’t we grow flowers?’ My mother always answered, ‘Because these are better than flowers.’ I never agreed, until one day . . .”



Other books written and illustrated by Grace Lin

Fortune Cookie Fortunes



LOG ON Find out more about Grace Lin at **www.macmillanmh.com**

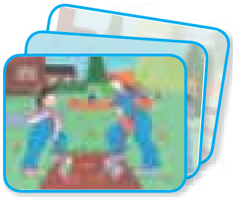
Author’s Purpose

Grace Lin wanted to write about a girl with strong ideas to entertain readers. Think about a time when you had strong ideas about something and then changed your mind. What were your ideas? What changed your mind? Write about it.

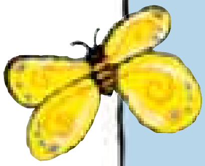
Comprehension Check

Retell the Story

Use the Retelling Cards to retell the story.

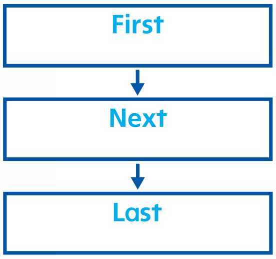


Retelling Cards



Think and Compare

1. Describe in order how the girl and her mother care for the garden. **Summarize: Sequence**



2. Reread page 244. How does the girl feel about her vegetable garden? Why? **Evaluate**
3. If you had a garden, would you like to have **blooming** flowers or vegetables that you can eat? Why? **Synthesize**
4. Why is it important for people to try new foods and learn about different cultures? **Analyze**
5. Do you think the boy in "City Garden," on pages 232–233, would like a garden like the one in *The Ugly Vegetables*? Explain. **Reading/Writing Across Texts**

marigolds
Sunflowers
Poppies
PEONIES

Science

Genre

A **Recipe** tells you how to make something to eat or drink.

Text Feature

Written Directions are steps that tell you how to make or do something.

Content Vocabulary

ingredients

directions

combine

Soups FROM AROUND THE GLOBE

People all over the world eat different kinds of soup. The soups are different because of what goes into them. People often cook with foods that grow near their homes. These recipes are for two soups from two different cultures. Ugly vegetable soup is made with Chinese vegetables. African peanut soup is made with **ingredients** that first came from Africa.

Ugly Vegetable Soup

Safety Note
Have an adult help you with this recipe.

Ingredients

1 can chicken broth
1 cup water
5 dried scallops
4-ounce piece of chicken
$\frac{1}{2}$ cup chopped sheau hwang gua
cornstarch
1 cup chopped sy gua
1 cup torng hau
1 cup shiann tsay
1 cup kong shin tsay

Directions

1. Bring chicken broth, water, and scallops to a boil in a large pot.
2. While waiting for broth to boil, cut chicken into bite-size pieces and coat them with cornstarch.
3. Wash all vegetables.
4. When broth starts to boil, put in the chicken pieces, one by one.

5. When the chicken looks cooked, add chopped sheau hwang gua and sy gua. Turn heat to low and let soup cook for about 10 minutes.
6. Then bring the soup to a high boil. Quickly add the torng hau, shiann tsay, and kong shin tsay and let them boil for 1 minute.

African Peanut Soup

Ingredients

2 tablespoons olive oil

1 large onion, chopped

2 large red peppers, chopped

3 cloves garlic, finely chopped

1 28-ounce can crushed tomatoes

8 cups of vegetable broth

$\frac{1}{4}$ teaspoon pepper

$\frac{2}{3}$ cup peanut butter

$\frac{1}{2}$ cup rice

Safety Note

Never cook or bake by yourself. Always have an adult help you in kitchen.

Directions

1. Put oil in a large pot. Heat over medium-high heat.
2. **Combine** onions and peppers in one pot. Cook until the vegetables are tender and lightly browned.
3. Stir in garlic, tomatoes, vegetable broth, and pepper.
4. Cook over low heat for 30 minutes.

5. Stir in the rice. Let the soup cook for another 15 to 20 minutes.
6. Stir in the peanut butter. When it has been completely mixed in, the soup is ready to serve.

Connect and Compare

1. When you make ugly vegetable soup, what do you do right after the broth starts to boil? **Written Directions**
2. Think about the recipes and *The Ugly Vegetables*. What plants would the characters in *The Ugly Vegetables* have to add to their garden to make African peanut soup? **Reading/Writing Across Texts**

Science Activity

Research a vegetable from one of the recipes. Write directions that tell how to grow and care for the plant.

LOG ON Find more vegetable facts at **www.macmillanmh.com**

Write a Story

Writer's Craft

Precise Words
Good writers use **precise words** to make their writing clear.

The pronouns I use agree with the verbs in my sentences.

Precise words help make my writing clear.

The Garden Project

by Lydia P.

Mom and I were in the kitchen talking when I remembered my science project. "Oh no! I need an idea for my science project," I told her. "It's due tomorrow!"

"Why don't you think about it while you water the garden," Mom said.

A little while later I came back inside. "I have my idea all set," I said. Then I showed her the colorful seeds that were left over from planting our vegetable garden. "I'm going to show different types of seeds and the plants they grow into. I got my idea from the garden!"

Your Turn

Write a realistic story about a family. Use precise words. The story should have a problem and a solution that could really happen. Be sure your story has a clear beginning, middle, and end. Use the Writer's Checklist to check your writing.

Writer's Checklist

☐ **Word Choice:** Did I choose precise words so that the reader will understand exactly what I mean?

☑ **Ideas:** Is my story about something that could really happen? Are the problem and its solution clear and interesting?

☑ **Conventions:** Do all the pronouns agree with the verbs in my sentences?

☑ **Voice:** Does my story sound like me?

Your Turn

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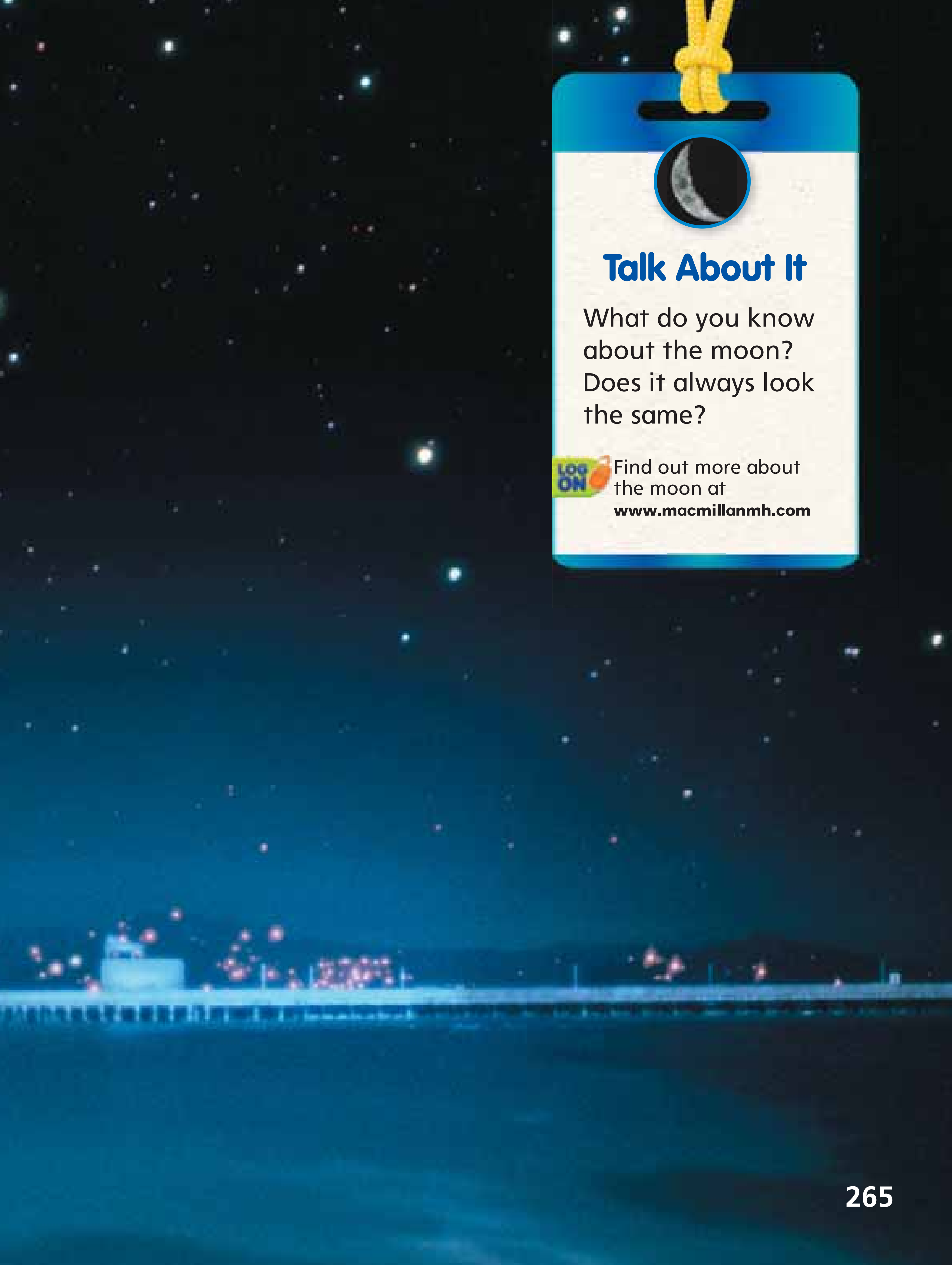
OUR MOON



Talk About It

What do you know about the moon? Does it always look the same?

Find out more about the moon at **www.macmillanmh.com**

Discover the Moon

Vocabulary

discovered
visible
lunar
spacecraft
surface
footprint

Word Parts

A **compound word** is a word that is made up of two smaller words.

foot + print = *footprint*

Scientists have discovered many things about the moon. They have learned about it by observing and by visiting the moon.

Scientists know that the moon does not give off its own light. Its visible light, the light you can see from Earth, is from the sun shining on it.

Scientists have learned that the moon takes about 28 days to move around Earth. As the moon moves, only some of the moon's bright surface is visible from Earth. These changes in the way the moon looks are called lunar, or moon, phases.

This picture shows all the different phases of the moon.

In 1969 scientists learned a lot more about the moon when a spacecraft flew and landed there. The vehicle carried three astronauts. These people walked on the moon's rocky surface. With each step they took, they left a mark, or footprint, in the gray dust. The astronauts found out that the moon is made of mostly rock.

Reread for Comprehension

Summarize

Classify and Categorize

When you summarize, you can classify and categorize the information that you read about. You put facts together that are alike in some way. Reread the selection and use the chart to classify and categorize facts about the moon and Earth.

Observing	Visiting

Comprehension

Genre

Expository Nonfiction gives information and facts about a topic.

Summarize

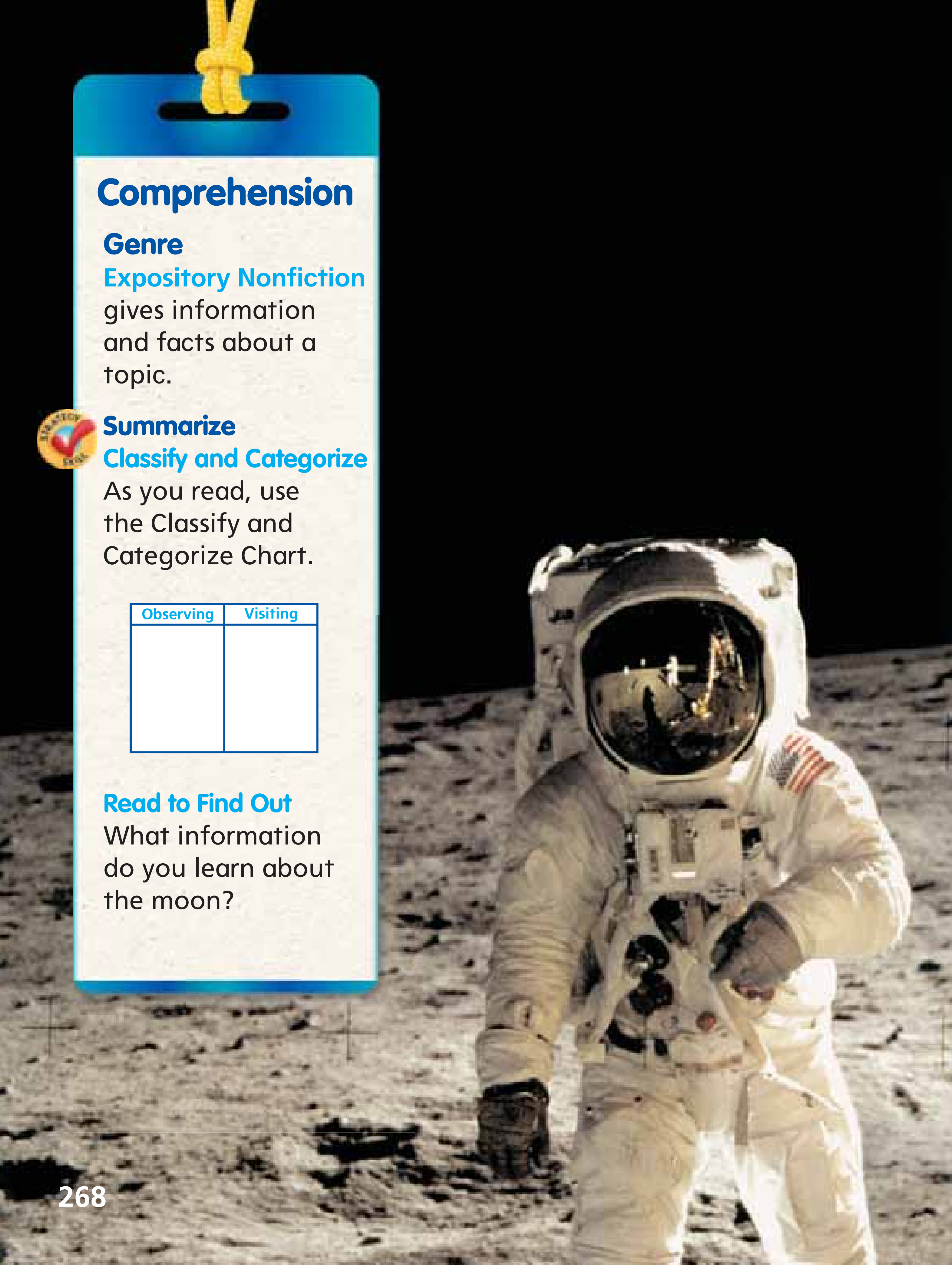
Classify and Categorize

As you read, use the Classify and Categorize Chart.

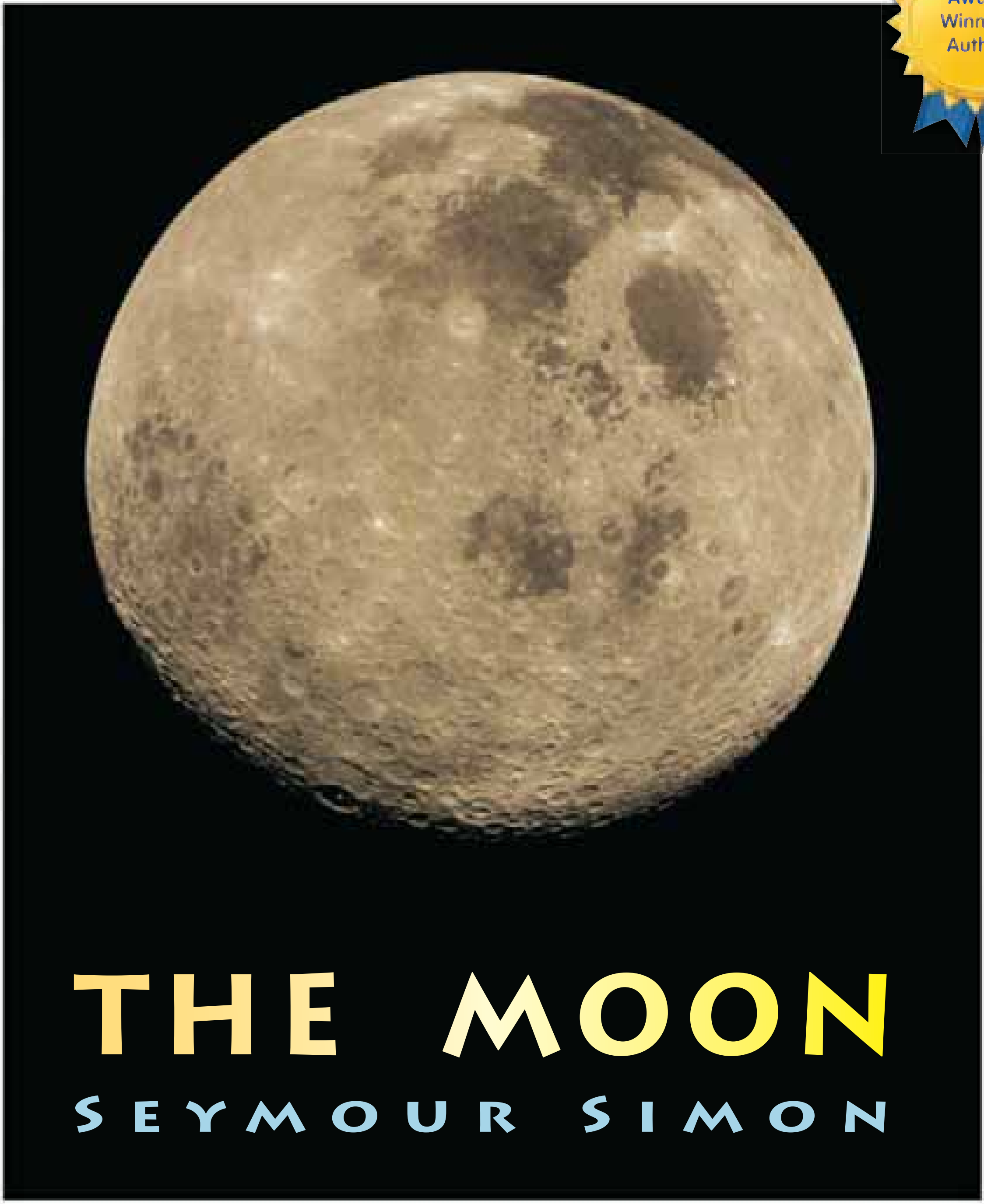
Observing	Visiting

Read to Find Out

What information do you learn about the moon?



Award Winning Author

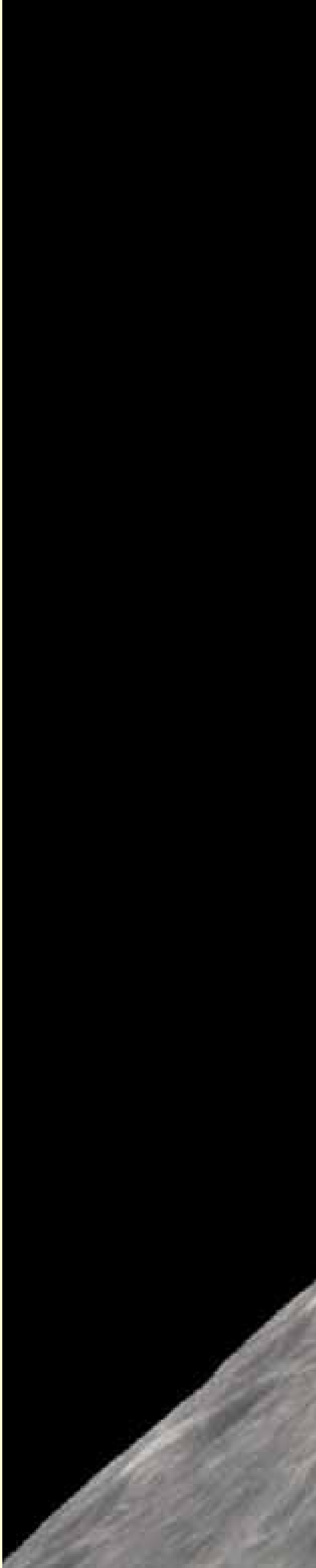


THE MOON

SEYMOUR SIMON

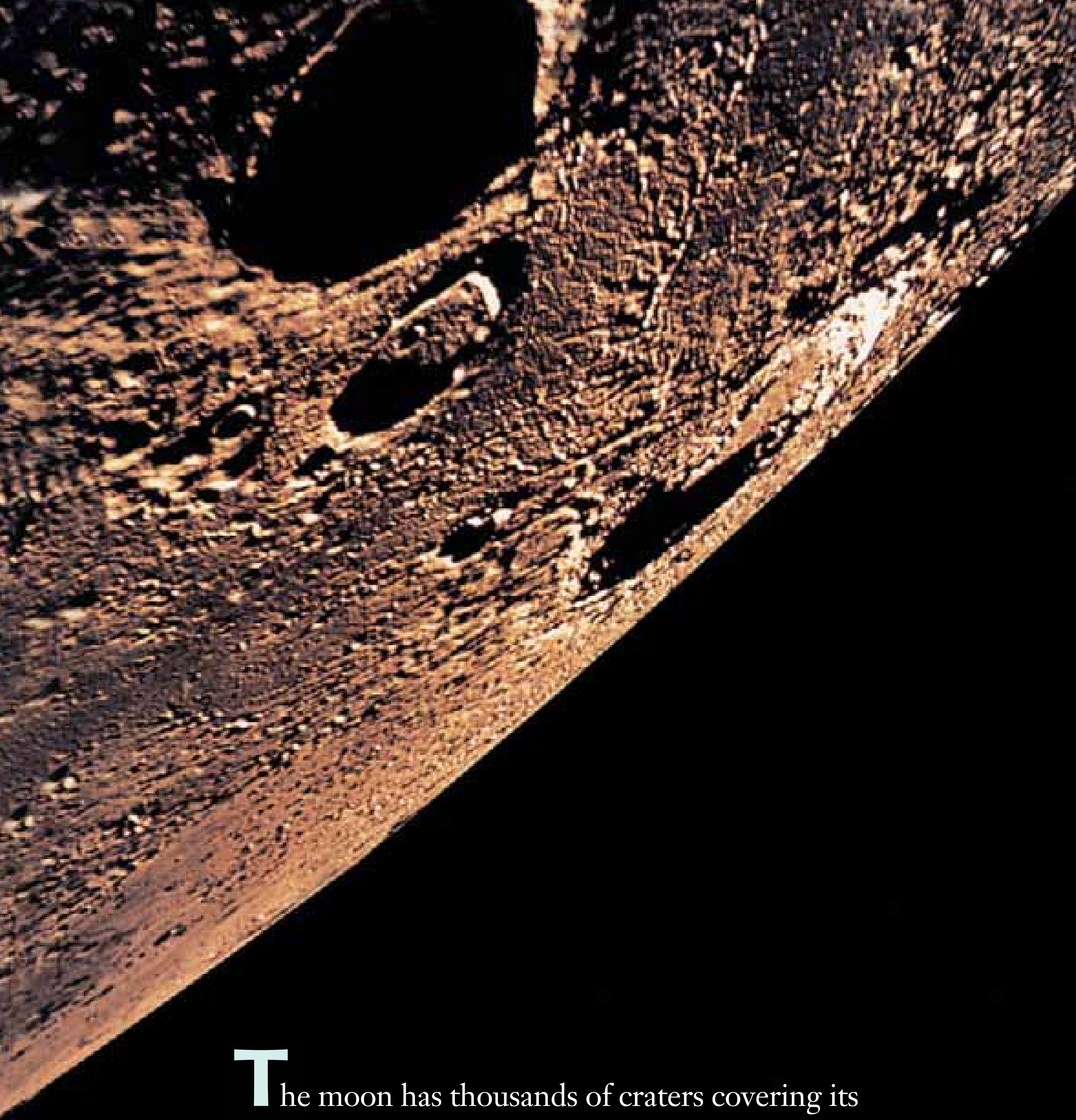
The moon is Earth's closest neighbor in space. It is about one quarter of a million miles away. In space that is very close.

The moon travels around Earth. It is Earth's only natural satellite. A satellite is an object that travels around another object. The moon takes about twenty-seven days and eight hours to go around the Earth once.

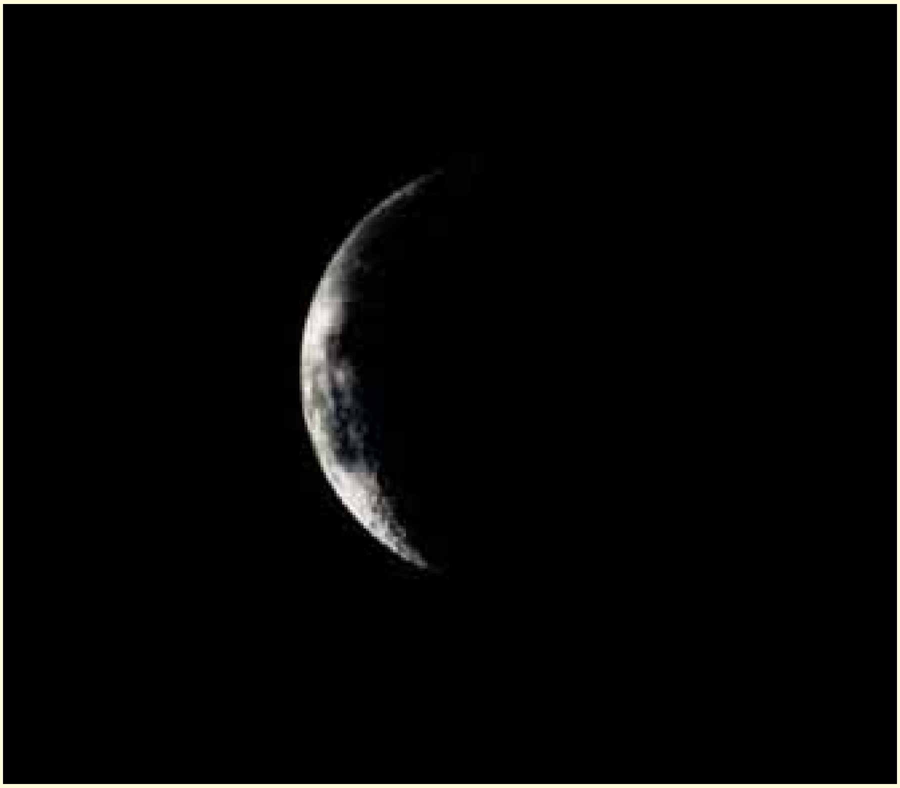


The moon is so close to the Earth that you can easily see light and dark on its **surface**. This photograph of the moon was taken through a telescope on Earth. The light places are mostly mountains and hills. The dark places are flatlands.

Classify and Categorize
What types of places can be found on the moon's surface?



The moon has thousands of craters covering its surface. Craters are ring-shaped flatlands with walls around them. A few craters on the moon are more than fifty miles wide, but most are smaller. Many of the craters are only a few feet wide.

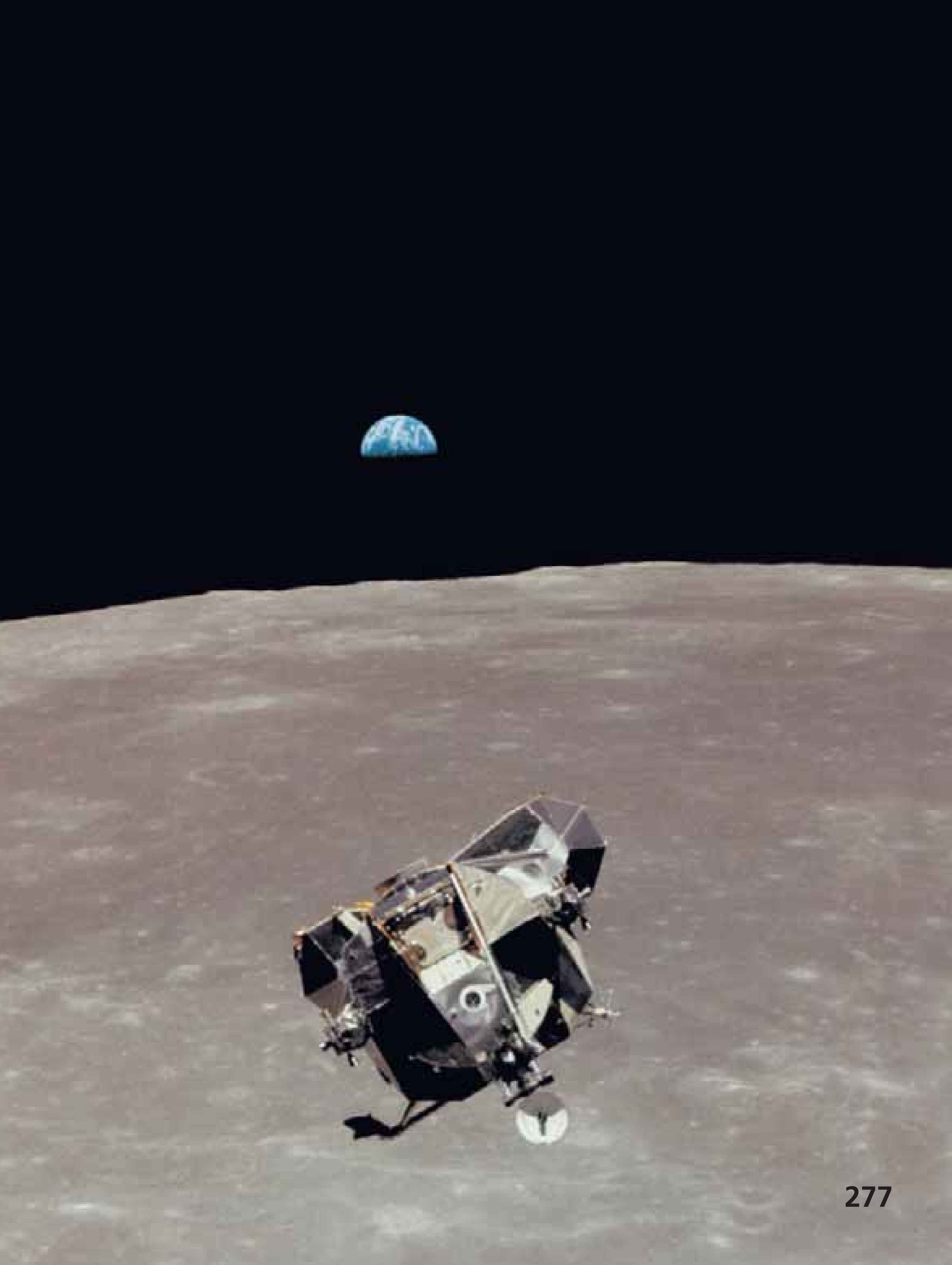


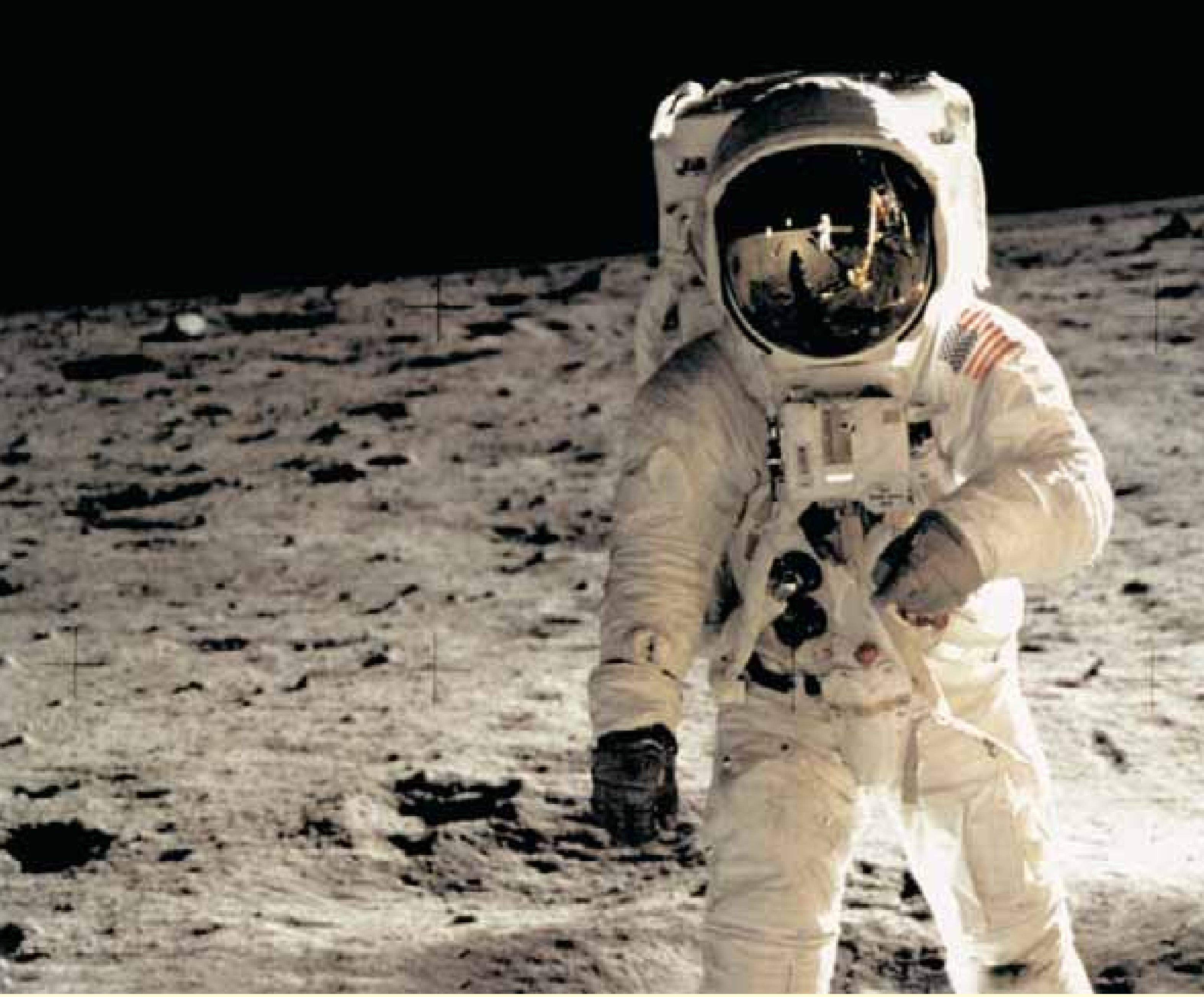
The moon is made of rock. We can see only part of the moon lit by sunlight. Sometimes we see the full moon. Other times we see a thin sliver. Every night the moon looks a little different. Each different shape is called a phase of the moon. The phases go from all-dark (new moon) through full moon, and back to new moon in about twenty-nine days. We call the phase in this photograph a crescent moon.

From earliest times, people gazed up at the moon and wondered about it. Were there living things on the moon? Would we ever be able to travel to the moon?

In 1961, the United States government decided to try to send a person to the moon within ten years.

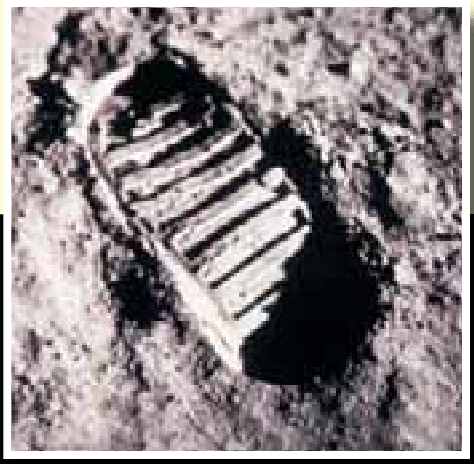
The space program was named Apollo. This photograph taken from the Apollo 11 *Columbia* **spacecraft** shows the **lunar** landing ship *Eagle*. It is on its way back from the surface of the moon. The surface of the moon is **visible** sixty miles below the spacecraft. A partly lit Earth hangs above the moon's horizon.

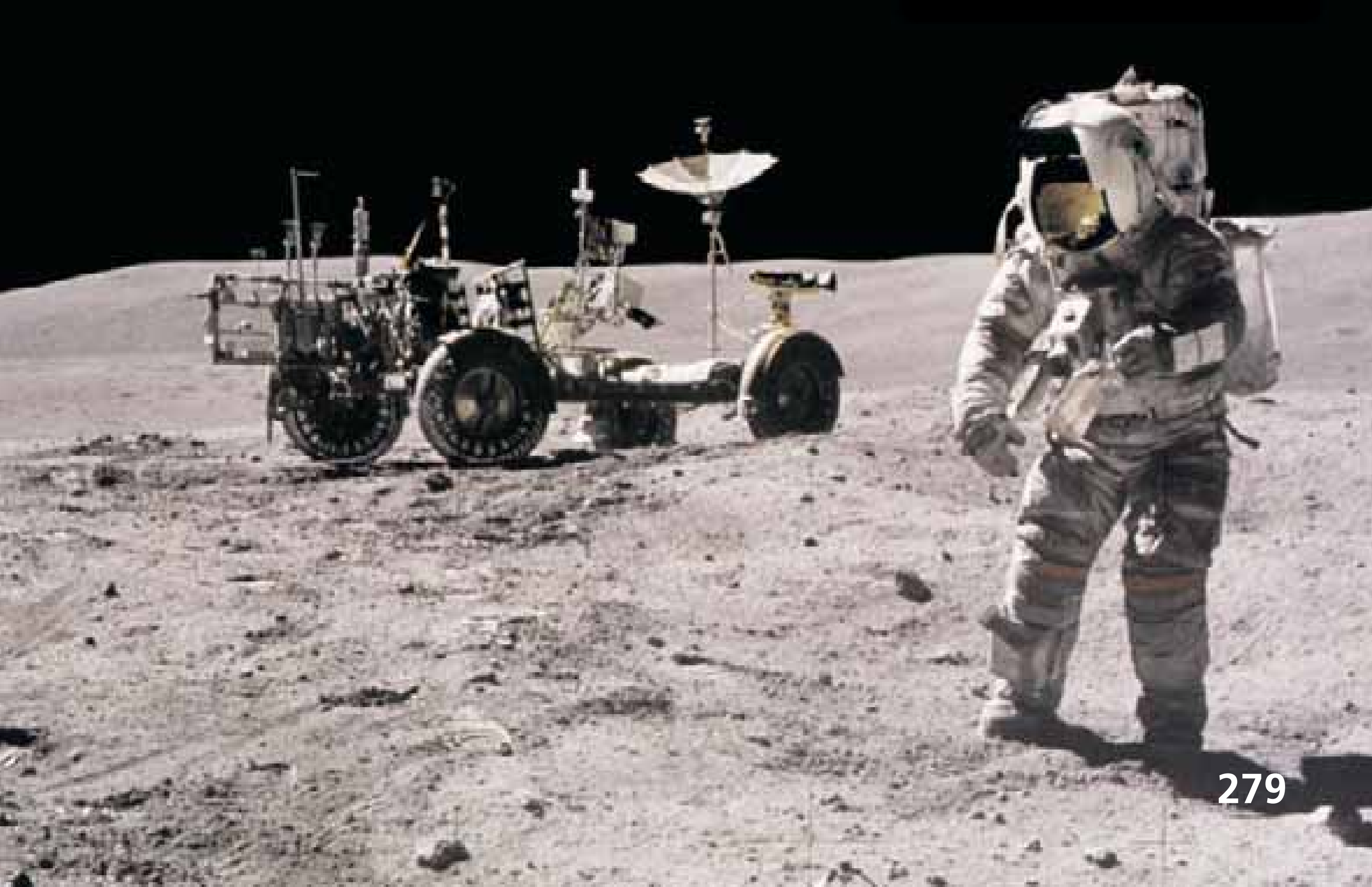


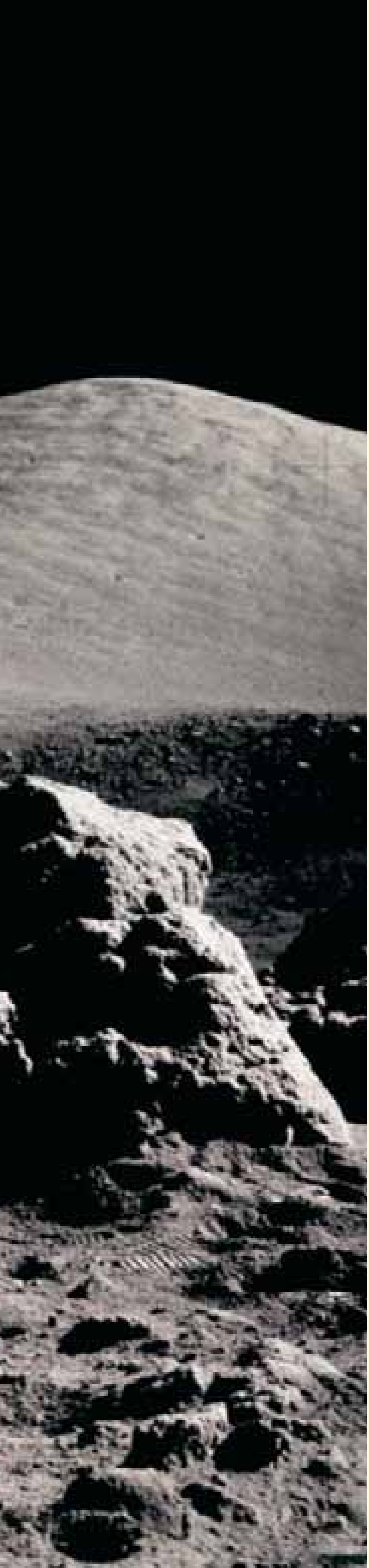


On July 20, 1969, Neil Armstrong became the first person to set foot on the moon. Armstrong was one of the astronauts on the Apollo 11 flight to the moon. He was followed shortly by Edwin Aldrin, another member of the United States Apollo 11 space flight. This is a photograph of Astronaut Aldrin standing on the moon. The face mask of his space suit reflects Astronaut Armstrong.

This **footprint** on the moon marks the first time that human beings have walked on ground that was not Earth. The footprint may last for a million years or longer. That is because there is no air on the moon and without air, there can be no winds to blow dust around.



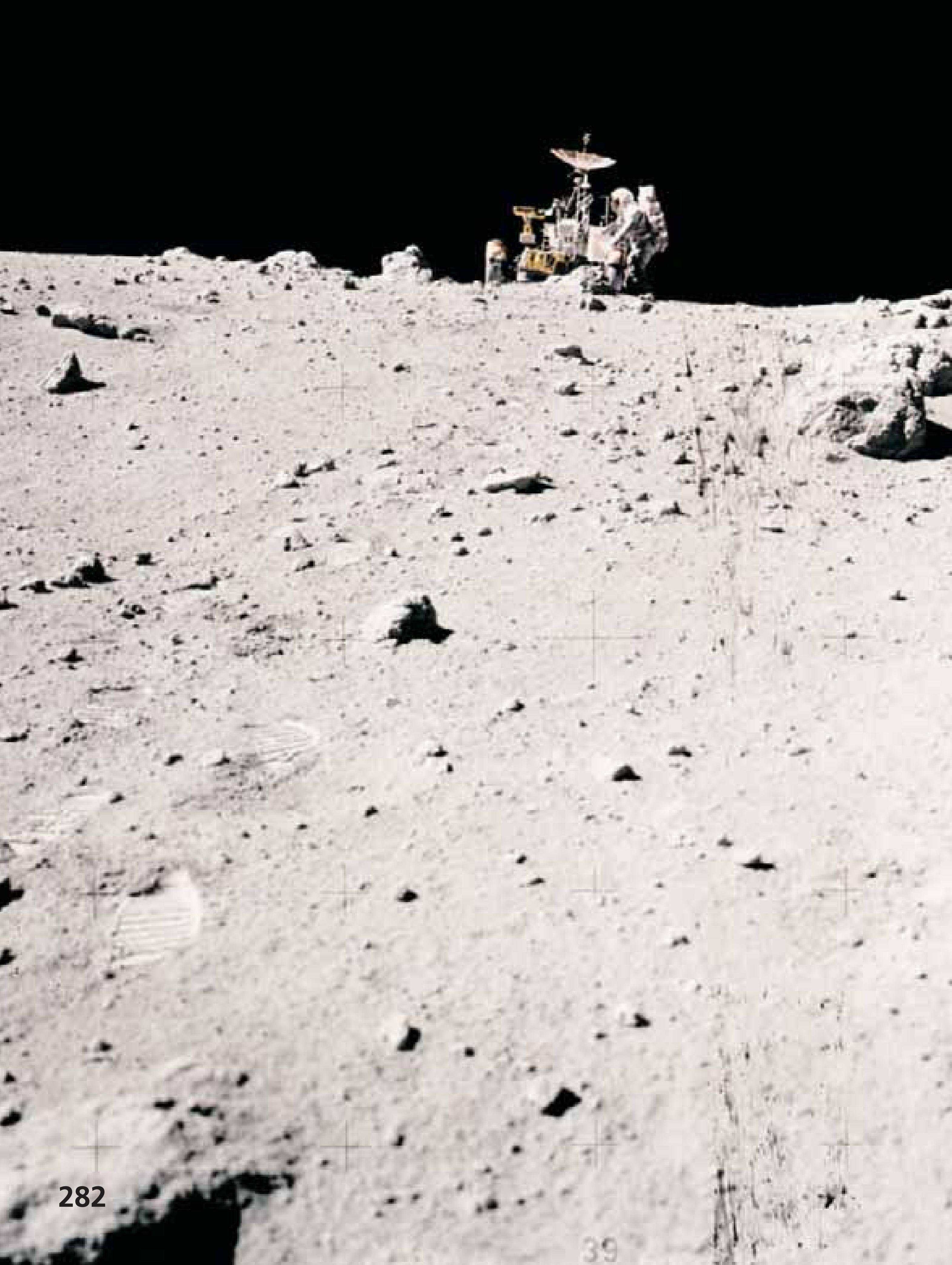




The astronauts **discovered** that the moon is a silent, strange place. The moon has no air. Air carries sound. With no air, the moon is completely silent. Even when the astronauts broke rocks or used the rockets on their spaceship, sound could not be heard.

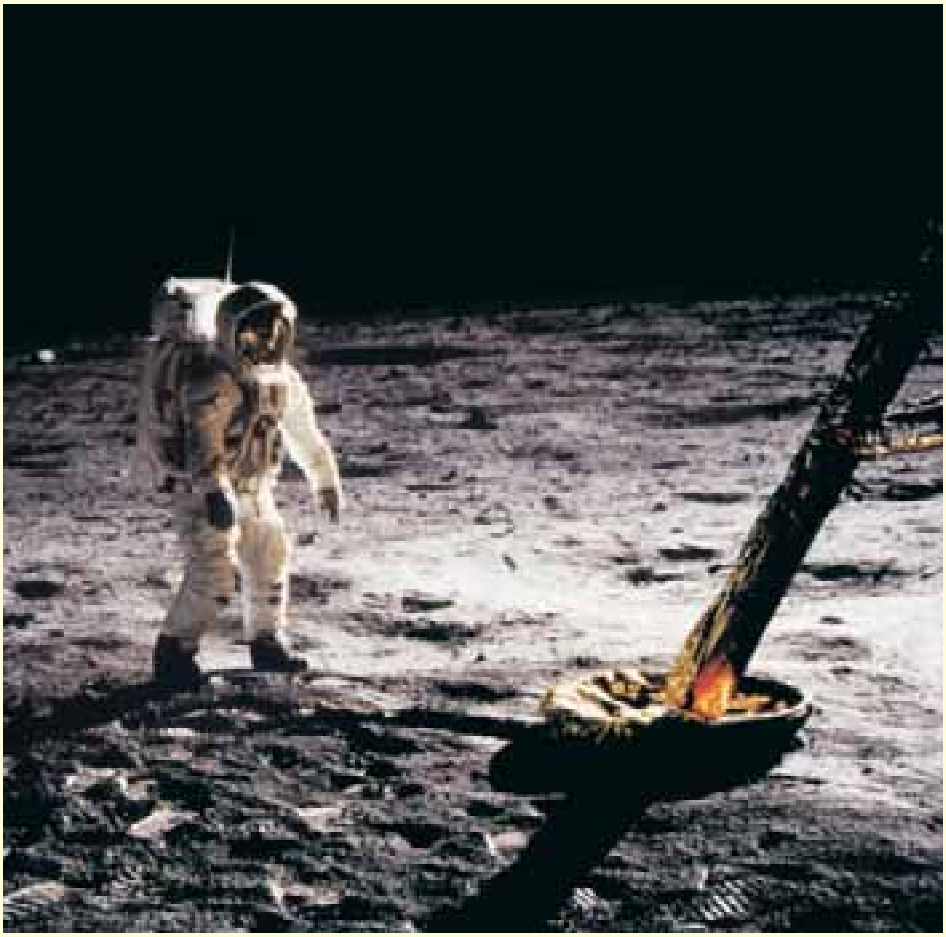
The sky on the moon is always black. On Earth, we can see stars only at night. On the moon, stars shine all the time.

Classify and Categorize
Why do you think the moon is described as a "silent, strange place"? Explain how this is different from Earth.



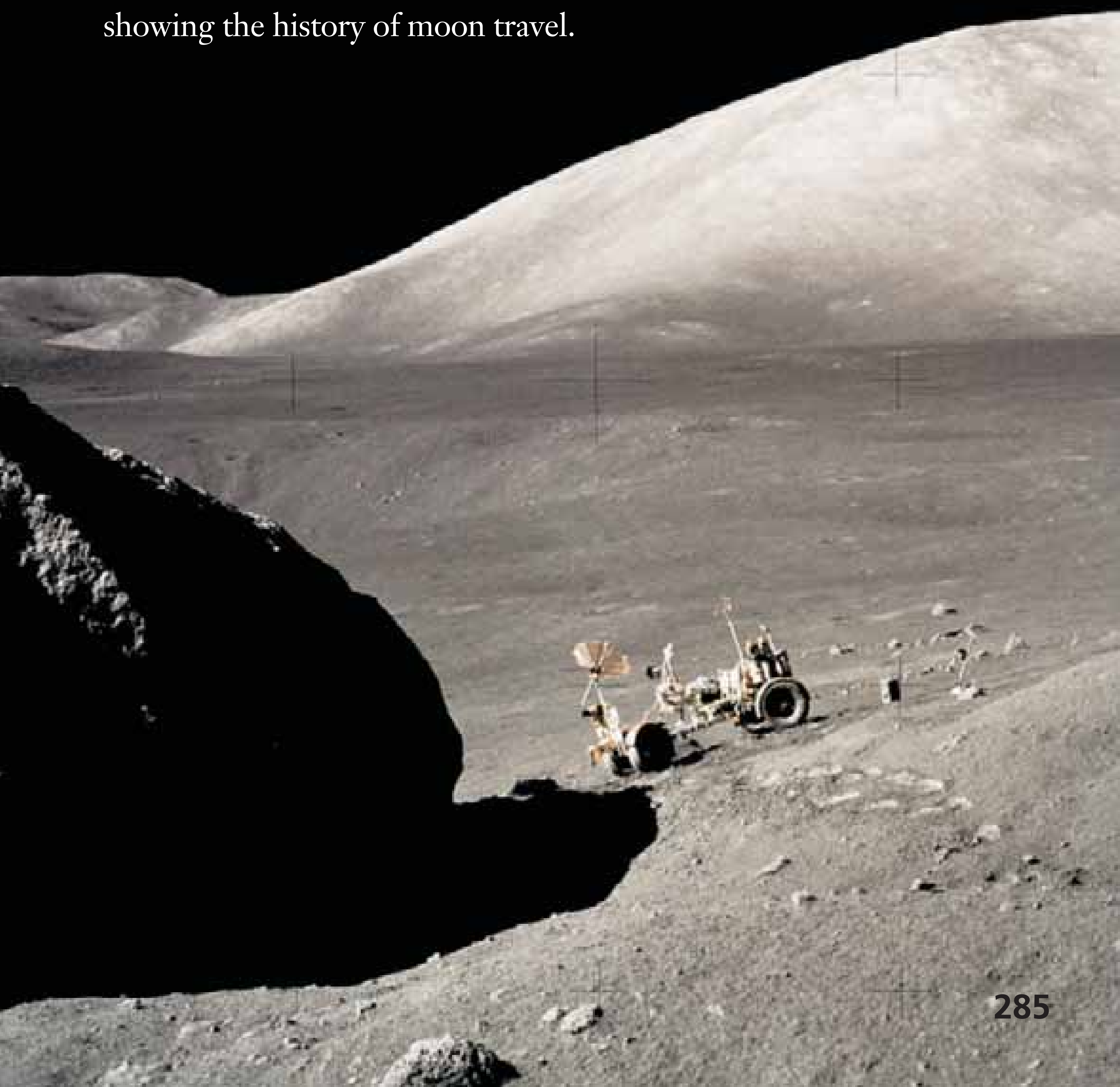
The moon does not have air, water, clouds, rain, or snow. It does not have weather. But the surface of the moon does warm up and cool off. The ground gets very hot or very cold because there is no air to spread the heat.

The temperatures in the daytime can be above the boiling point of water. At night, the temperature can drop hundreds of degrees below zero. The astronauts' space suits kept their bodies at the right temperature. The astronauts carried tanks on their backs that contained the air they needed for breathing.



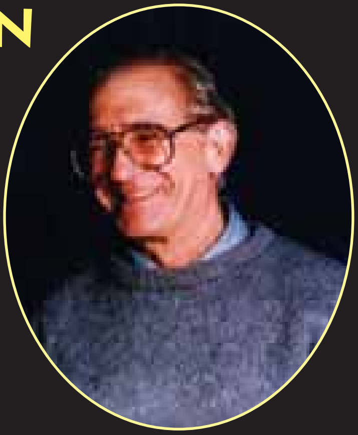
Each Apollo crew brought back more information about the moon. Scientists all over the world studied the information the astronauts brought back. They learned that the moon is about the same age as Earth. But the moon's soil and rocks are different from Earth's. For instance, moon rocks contain no water at all, while almost all rocks on Earth contain a small amount of water.

Apollo 17 was the last spaceship to carry people to the moon. It was launched in December 1972. The astronauts of Apollo 17 discovered the oldest rock ever found on the moon. Before the astronauts returned to Earth, they left a plaque on the moon showing the history of moon travel.



Earth and its moon are close in space, but very different from each other. Earth is a blue, cloud-covered planet, filled with living things. The moon is a dead world. Without air or water, a cloud can never appear in its black sky and a raindrop will never fall.

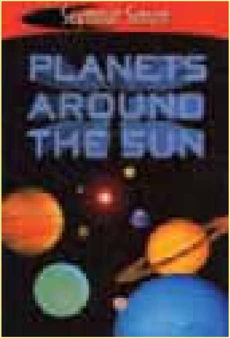
Find Out About Seymour and Space



The very first piece **SEYMOUR SIMON** wrote for children was an article about the moon. He remembers, "I submitted an article, before we set foot on the moon, about what we might find there."

Seymour was always interested in science and space. In junior high school he joined a space club. "During that time," Seymour says, "I made my own telescope. I met astronomers. And that interest in space led to the many books about space that I have written and still write: books about the planets and books about stars and the sun, and news from space."

Other books written by
Seymour Simon



Find out more about
Seymour Simon at
www.macmillanmh.com

Author's Purpose

Seymour Simon wanted to inform readers about the moon and space. Write about a topic in science that you like.

Comprehension Check

Retell the Story

Use the Retelling Cards to retell the selection.

Retelling Cards

Think and Compare

Observing	Visiting

1. Think about the information in the selection. How can you classify the information about the moon? **Summarize: Classify and Categorize**

2. Reread page 283. Why did the astronauts wear space suits when they walked on the moon's surface? **Analyze**

3. If you had the chance, would you travel into space? Explain why or why not. **Synthesize**

4. After reading the selection, how do you know that people think it is important to learn more about the moon? **Evaluate**

5. What do you learn from "Discover the Moon" on pages 266–267 that you do not learn from *The Moon*? **Reading/Writing Across Texts**

Poetry

Genre

Poems can describe something and help you form a picture of it in your mind.

Literary Elements

Personification is a way of speaking about a thing as if it were human and could do things that humans do.

Imagery is a poet's use of words to create a picture in the reader's mind.

Night Comes...

by Beatrice Schenk de Regniers

Night comes
leaking
out of the sky.

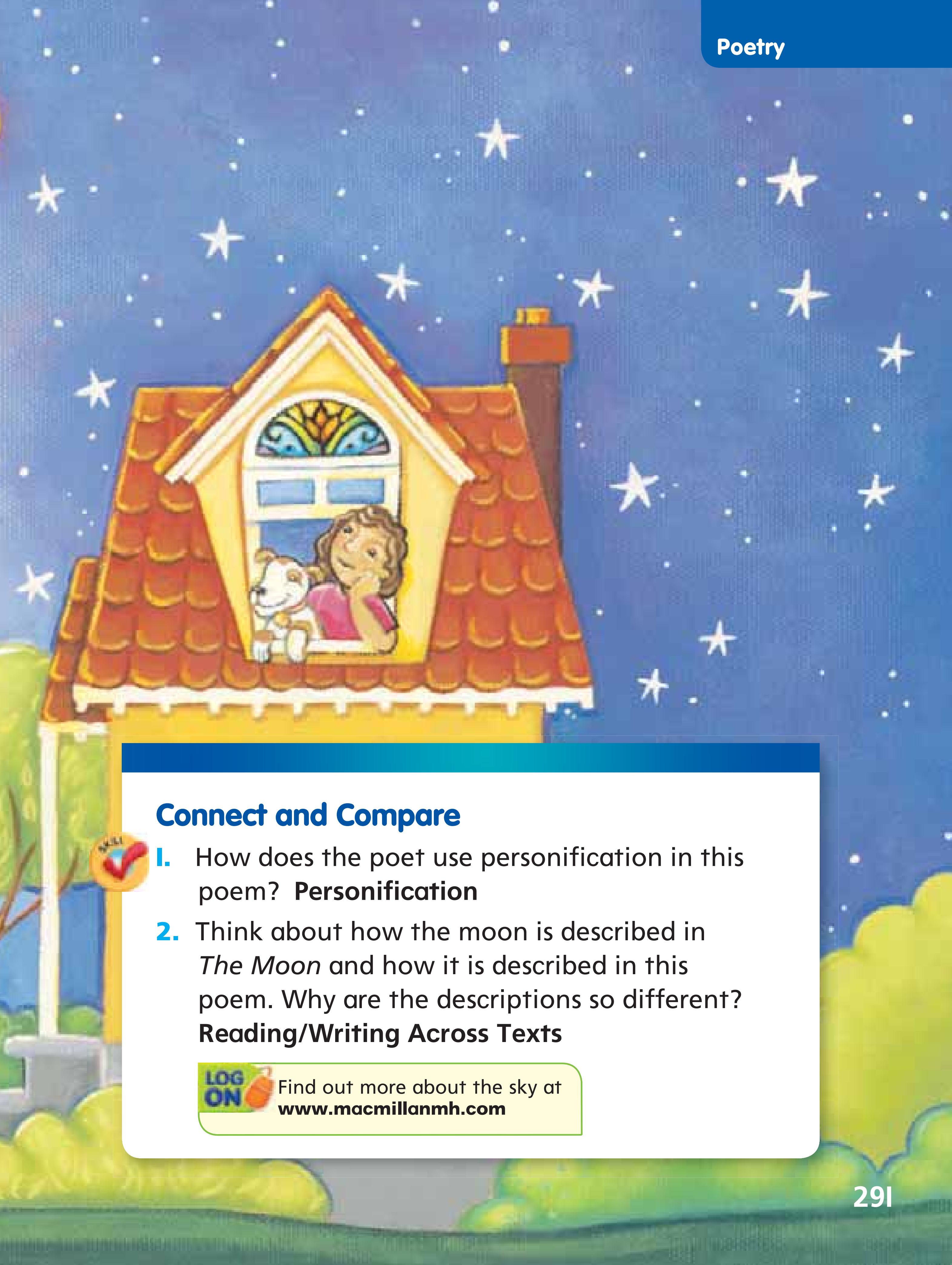
Stars come
peeking.

Moon comes
sneaking,
silvery-sly.

Who is
shaking,
shivery-
quaking?

Who is afraid
of the night?

Not I.



Connect and Compare

1. How does the poet use personification in this poem? **Personification**
2. Think about how the moon is described in *The Moon* and how it is described in this poem. Why are the descriptions so different? **Reading/Writing Across Texts**

LOG ON Find out more about the sky at **www.macmillanmh.com**

Write a Description

Writer's Craft

A Good Paragraph
Good writers include a topic sentence and supporting details in each **paragraph**. These help readers form a picture in their minds.

My Moon Home

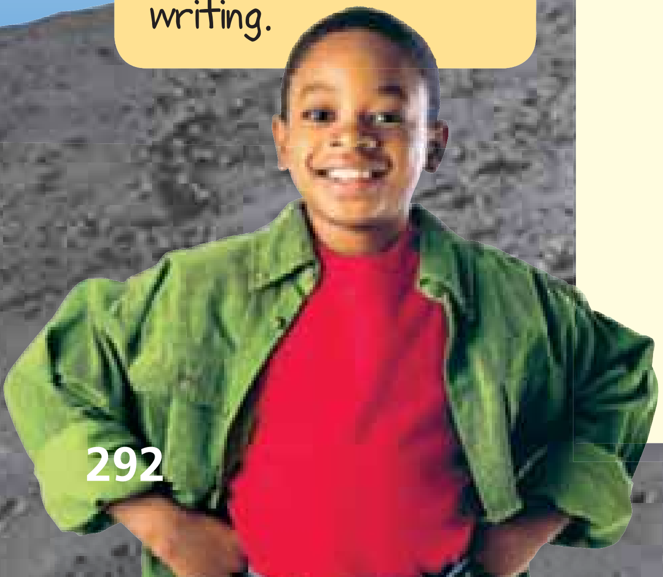
by Trevor S.

My new home on the moon is very different from my home on Earth. On Earth, our house had lots of big rooms. Here, my parents and I share a small pod. Ten round pods make up each living complex. The complex is filled with other families.

Our pod doesn't have a kitchen. We don't need one because we just heat up plastic packets of food. Astronauts deliver our food in big shipments every six months.

A reader can form a picture of my moon home because I used strong details to describe it.

I used the contraction doesn't correctly in my writing.



Your Turn

Write a paragraph that describes an imaginary place. Pay attention to details about what you see, hear, smell, and feel in the place. Use contractions to make your writing sound like the way you speak. Then use the Writer's Checklist to check your writing.

Writer's Checklist

- ☐ **Organization:** Did I write a **good paragraph** with a topic sentence and supporting details?
- ☑ **Voice:** Does my writing sound like the way I speak?
- ☑ **Conventions:** Did I use contractions correctly? Did I put the apostrophes where they belong?
- ☑ **Sentence Fluency:** Did I vary my sentences? Do they flow when I read them aloud?

Answer Questions

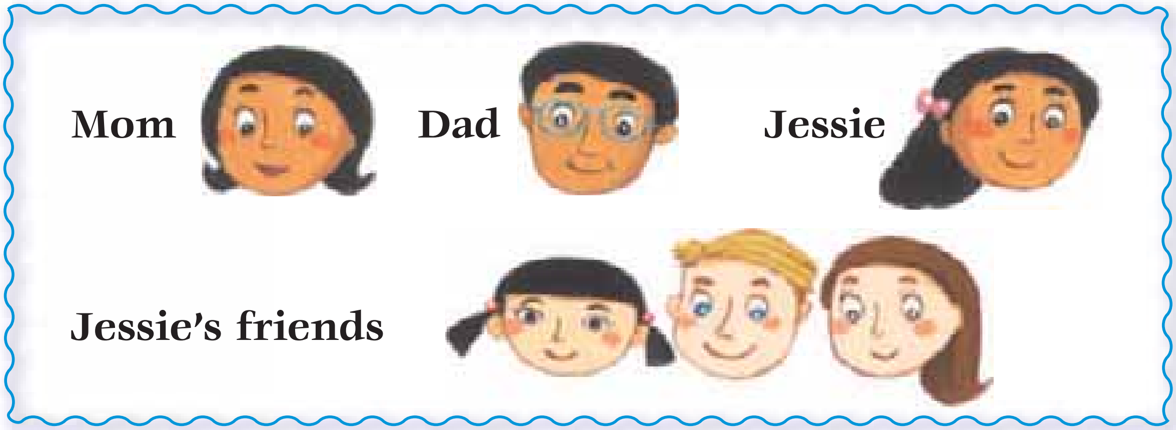
Test Strategy

Think and Search

Read to find the answer. Look for information in more than one place.

A Birthday Treat

by Denise Jones



Mom: I have a treat for your birthday today!

Jessie: What is it?

Mom: It's a trip to the science museum.

Jessie: Hooray! That's my favorite place!

Mom: I am glad that you like the treat!

Jessie: Can I ask for more birthday treats?

Go on ▶

Mom: What?

Jessie: Can I invite my friends Ashley, Samantha, and Blake to go with me, please?

Mom: I'm sorry, but I only have two tickets. Also, we need to leave right away. We don't want to miss the volcano movie. Seat belt on? Good. Would you read the directions for me? Where do we go first?

Jessie: Go north on Elm Street for ten blocks. Then make a left onto Oak Avenue. Make a right at the gas station onto Pine Street. The museum is on your right.

Go on ▶

Mom: We have 45 minutes before the movie starts. Do you want to look around?

Jessie: Sure! Let's check out the dinosaur exhibit. The dinosaur skeletons reach to the ceiling!

Mom: Before we go, I need to stop at the cafeteria. Let's open the door.

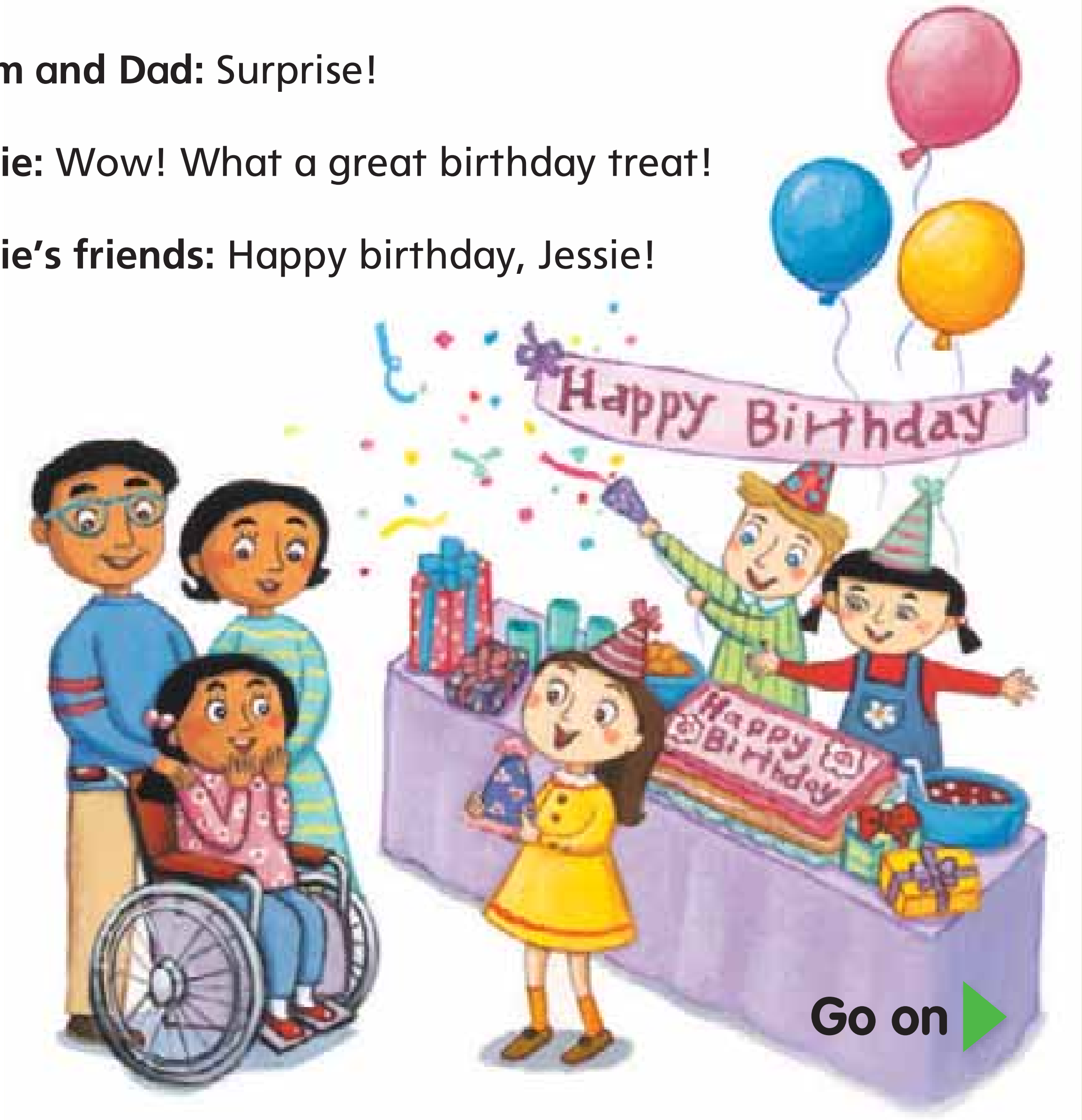
Jessie: What's this?

Jessie's friends: Surprise! Happy birthday!

Mom and Dad: Surprise!

Jessie: Wow! What a great birthday treat!

Jessie's friends: Happy birthday, Jessie!



Go on

Tip

Look for information.

Directions:
Answer the questions.

1. **What two things do Jessie and her mom do first?**

   A They go to the museum and park.
   B They go to the cafeteria and have a party.
   C They talk about the museum and get in the car.
   D They eat and sing "Happy Birthday."

2. **What do Jessie and her mom want to see at the museum?**

   A volcano movie and gem exhibit
   B dinosaur exhibit and volcano movie
   C volcano movie and planetarium
   D map and transportation exhibits

3. **Describe what Jessie finds in the museum.**

Writing Prompt

Write a story about giving a friend a surprise party. Be sure your story has a beginning, middle, and end.

STOP

Tip

Look for information.

Directions: Answer the questions.

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Writing Prompt

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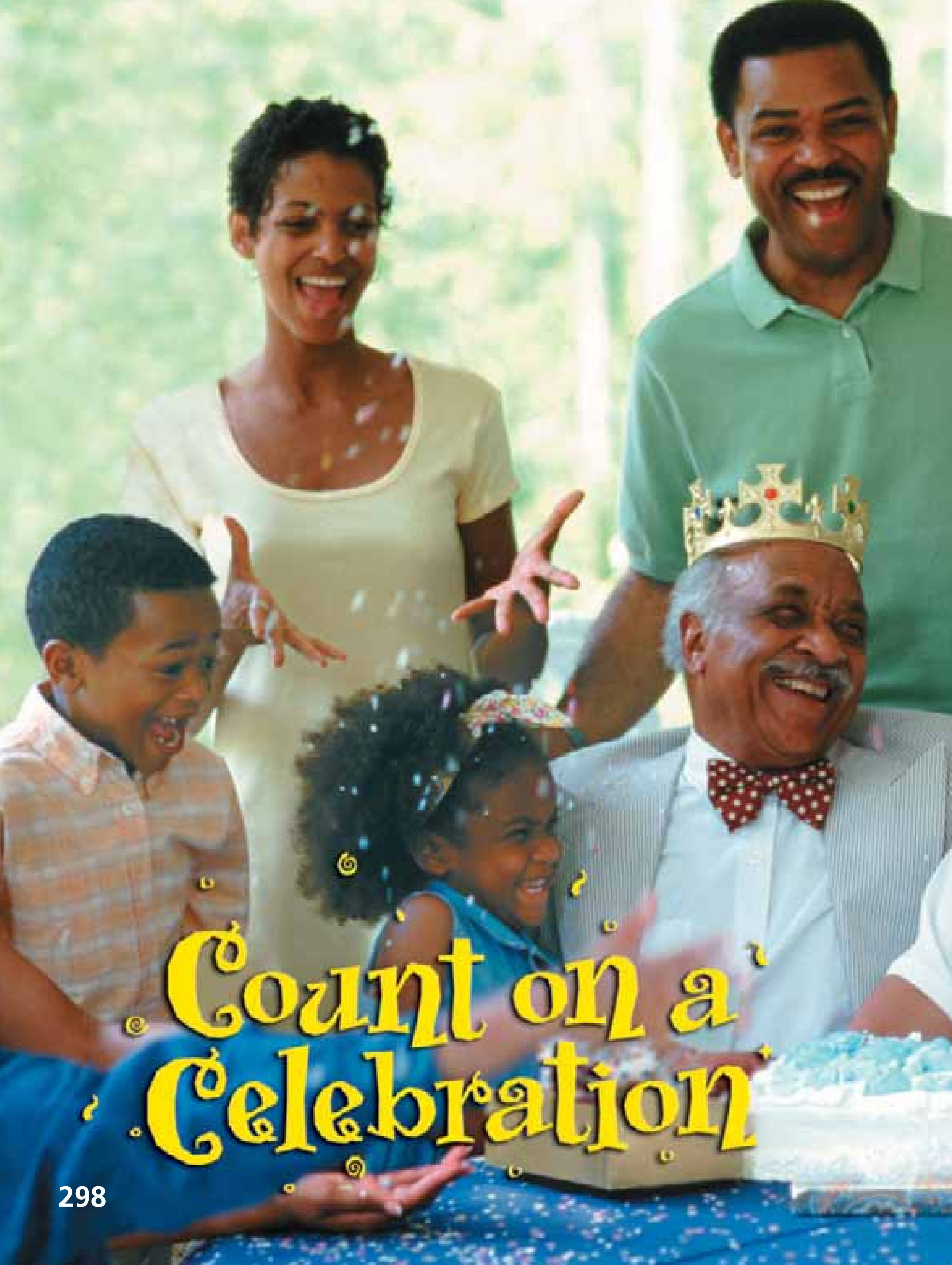


Count on a Celebration

Talk About It

What kinds of celebrations does your family have? Do you have special traditions?

Find out more about celebrations at **www.macmillanmh.com**

Vocabulary

menu
fetch
forgetting
simmered
assembled
devoured

Word Parts

Verbs are action words that can have **word endings** like -*s*, -*ed*, or -*ing*. These endings tell you when the action took place.

The -*ed* ending means that the action happened in the past.

Yesterday we *devoured* the food.

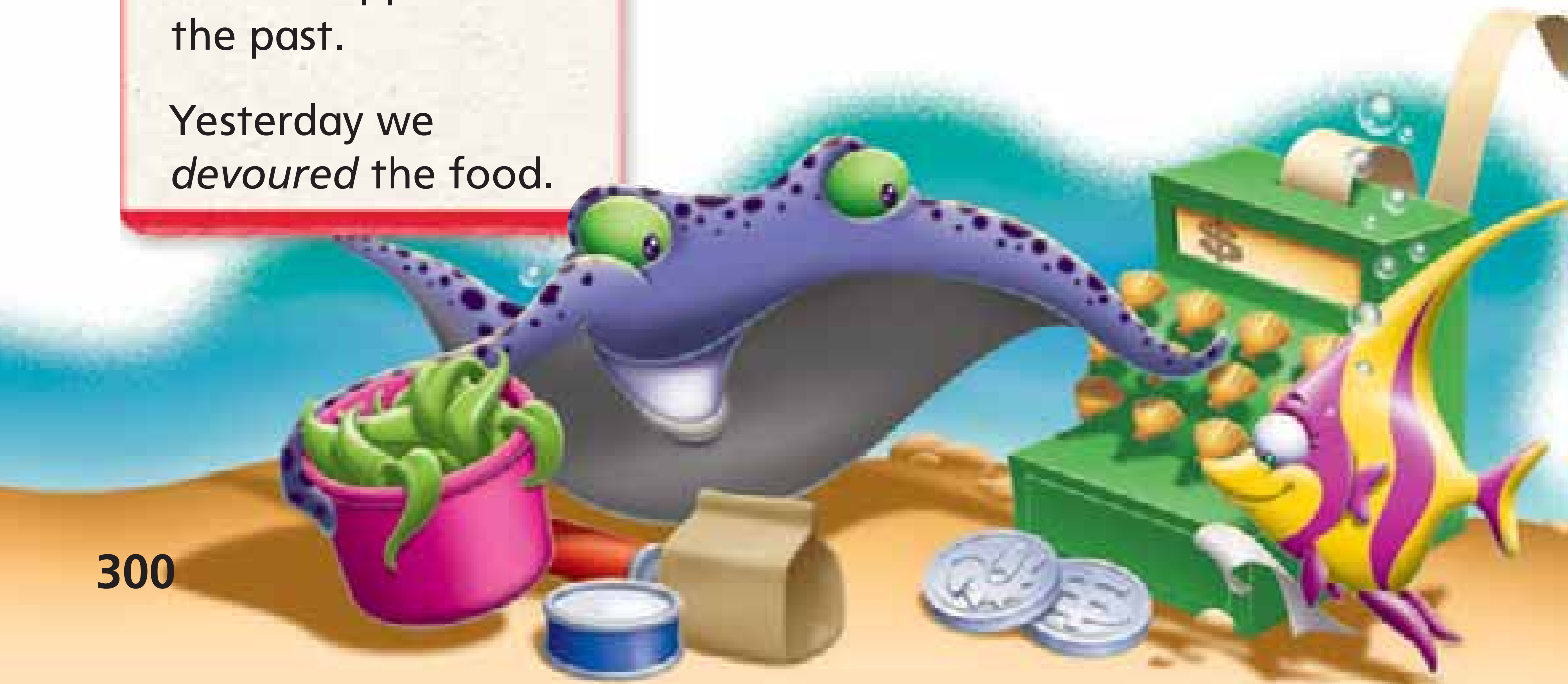
Bobo's Celebration

by Keith Fish

Mom and I planned a surprise party for my brother Bobo.

First, my mom and I made a **menu**. It listed all the foods we would serve. The main dish was Bobo's favorite—seaweed stew!

Mom asked me to **fetch** the things we needed, so I swam to the Ship Shop. When I went to pay, I knew that I was **forgetting** something. I checked my list. I had not remembered the seaweed! So, I asked Ron Ray if he had any.



"Yes, I have some seaweed," he said. "That's 20 sand dollars, please." I paid him and swam home.

The day of the party, the stew **simmered** on the stove. I watched it bubble over low heat for hours.

An hour before the party, the guests **assembled** in one spot. The group gathered with Mom and me by the reef. When Bobo came, we yelled "Surprise!"

Bobo's party was fun. We **devoured** all of the stew. We ate until there was nothing left. Bobo said it was the best surprise ever!

Reread for Comprehension

Story Structure

Fantasy and Reality

A fantasy story could not happen in real life. A reality story could happen. Reread the story and use the chart to figure out whether "Bobo's Celebration" is a fantasy or reality story.

Reality	Fantasy

Comprehension

Genre

Fantasy is a story that has made-up characters and settings that could not happen in real life.

Story Structure

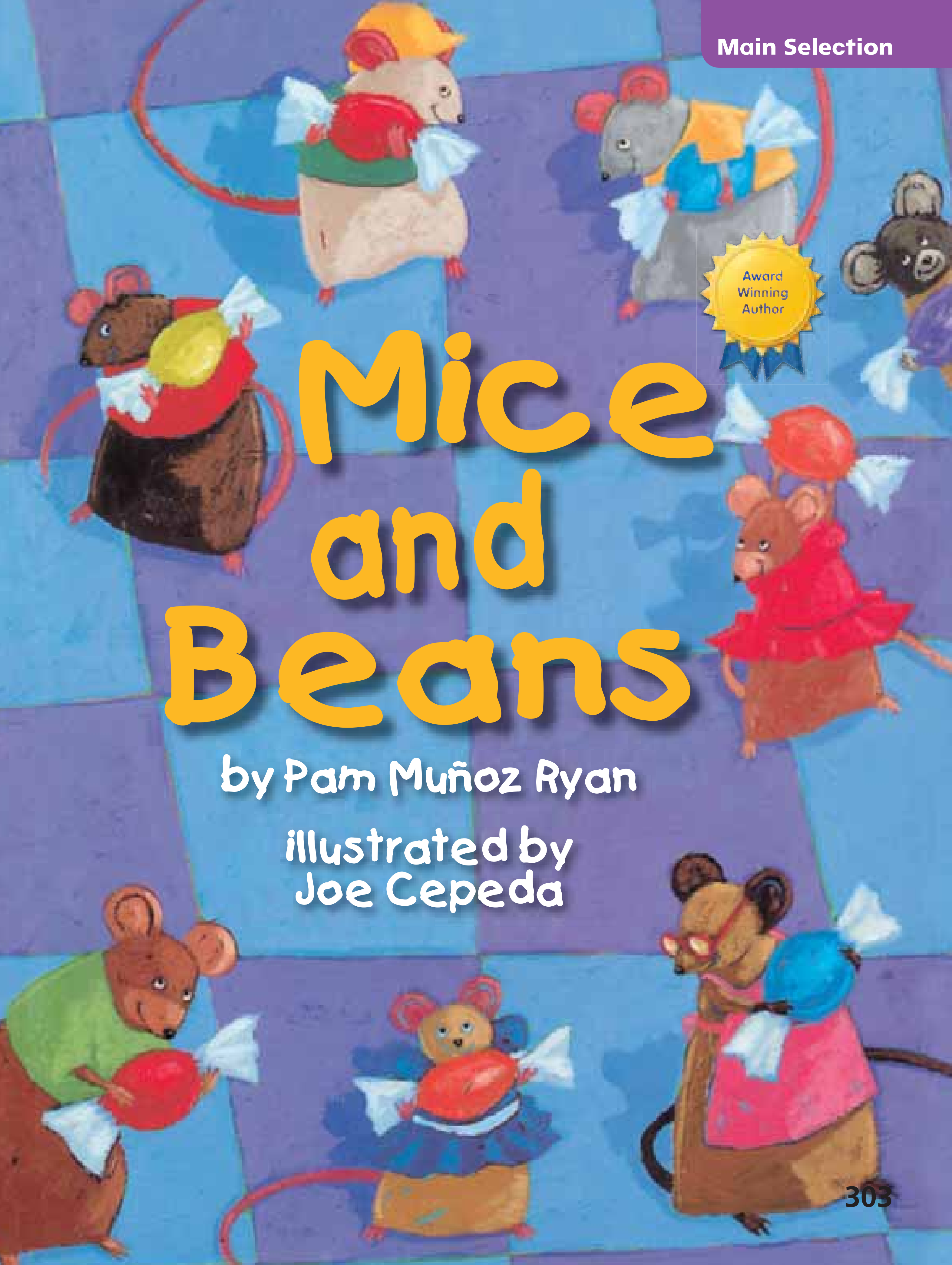
Fantasy and Reality

As you read, use your Fantasy and Reality Chart.

Reality	Fantasy
What Could Happen?	What Could Not Happen?

Read to Find Out

What do the mice do in this story that they can't do in real life?


Award Winning Author

Mice and Beans

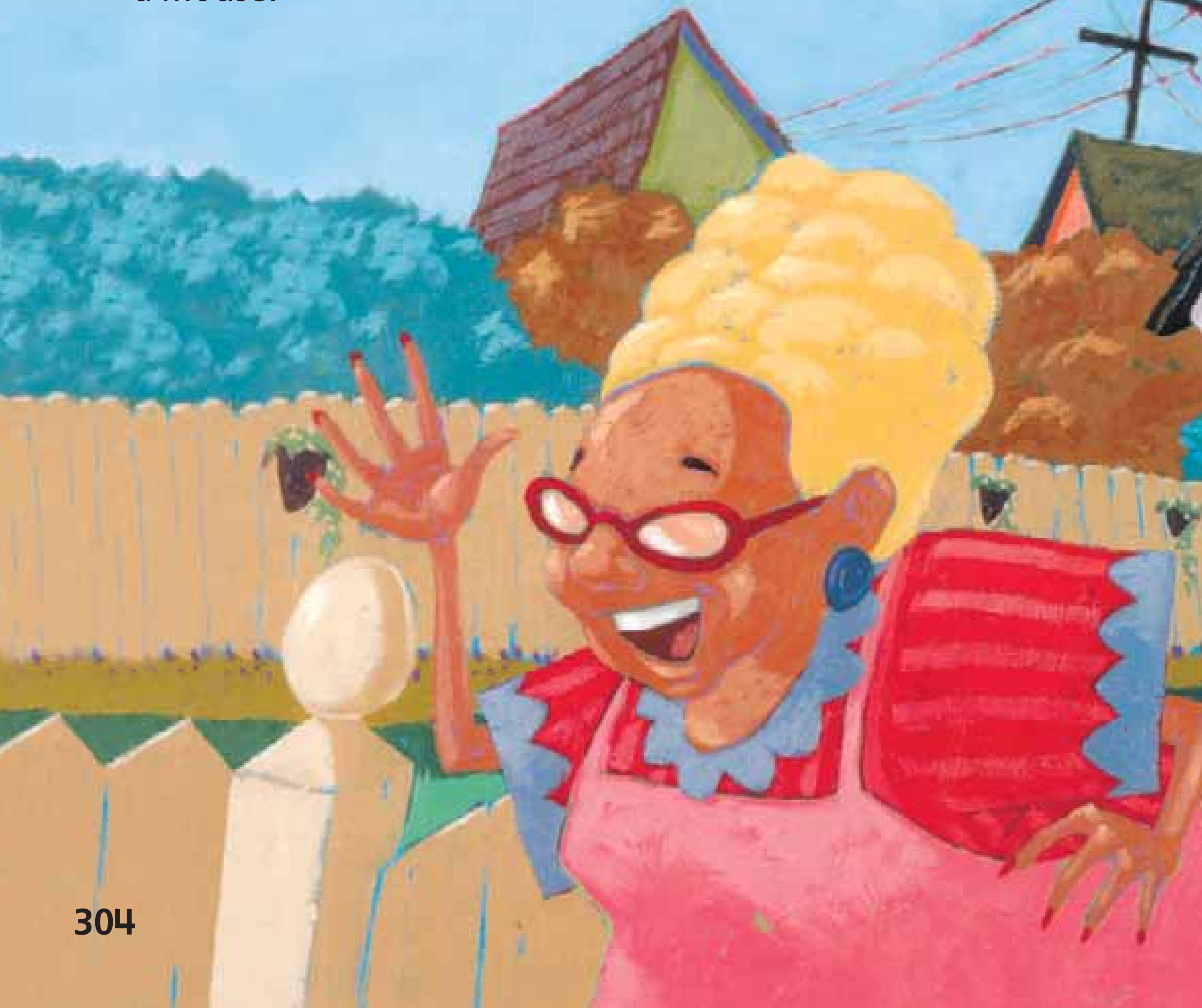
by Pam Muñoz Ryan

illustrated by
Joe Cepeda

Rosa María lived in a tiny house with a tiny yard. But she had a big heart, a big family, and more than anything, she loved to cook big meals for them.

In one week, her youngest grandchild, Little Catalina, would be seven years old, and the whole family would squeeze into her *casita* for the party.

Rosa María didn't mind because she believed what her mother had always said: "When there's room in the heart, there's room in the house, **except** for a mouse."

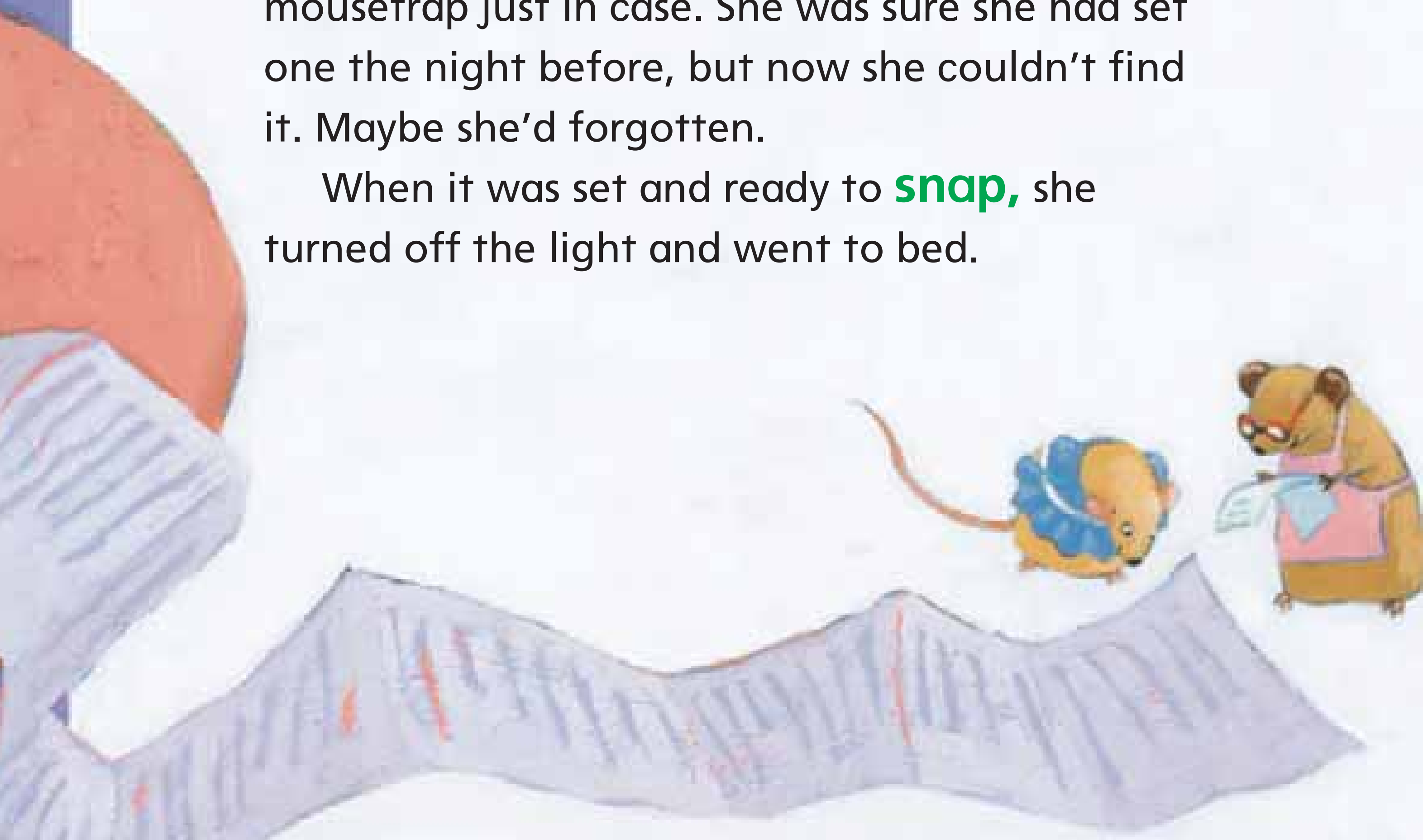


Sunday, Rosa María planned the **menu**: *enchiladas*, rice and beans (no dinner was complete without rice and beans!), birthday cake, lemonade, and a *piñata* filled with candy.

She ordered the birthday present—something Little Catalina had wanted for a long time.

Satisfied with the plans, she wiped down the table so she wouldn't get mice and took out a mousetrap just in case. She was sure she had set one the night before, but now she couldn't find it. Maybe she'd forgotten.

When it was set and ready to **snap,** she turned off the light and went to bed.



Monday, Rosa María did the laundry. She washed and ironed her largest tablecloth and the twenty-four napkins that matched. But when she finished, she only counted twenty-three.

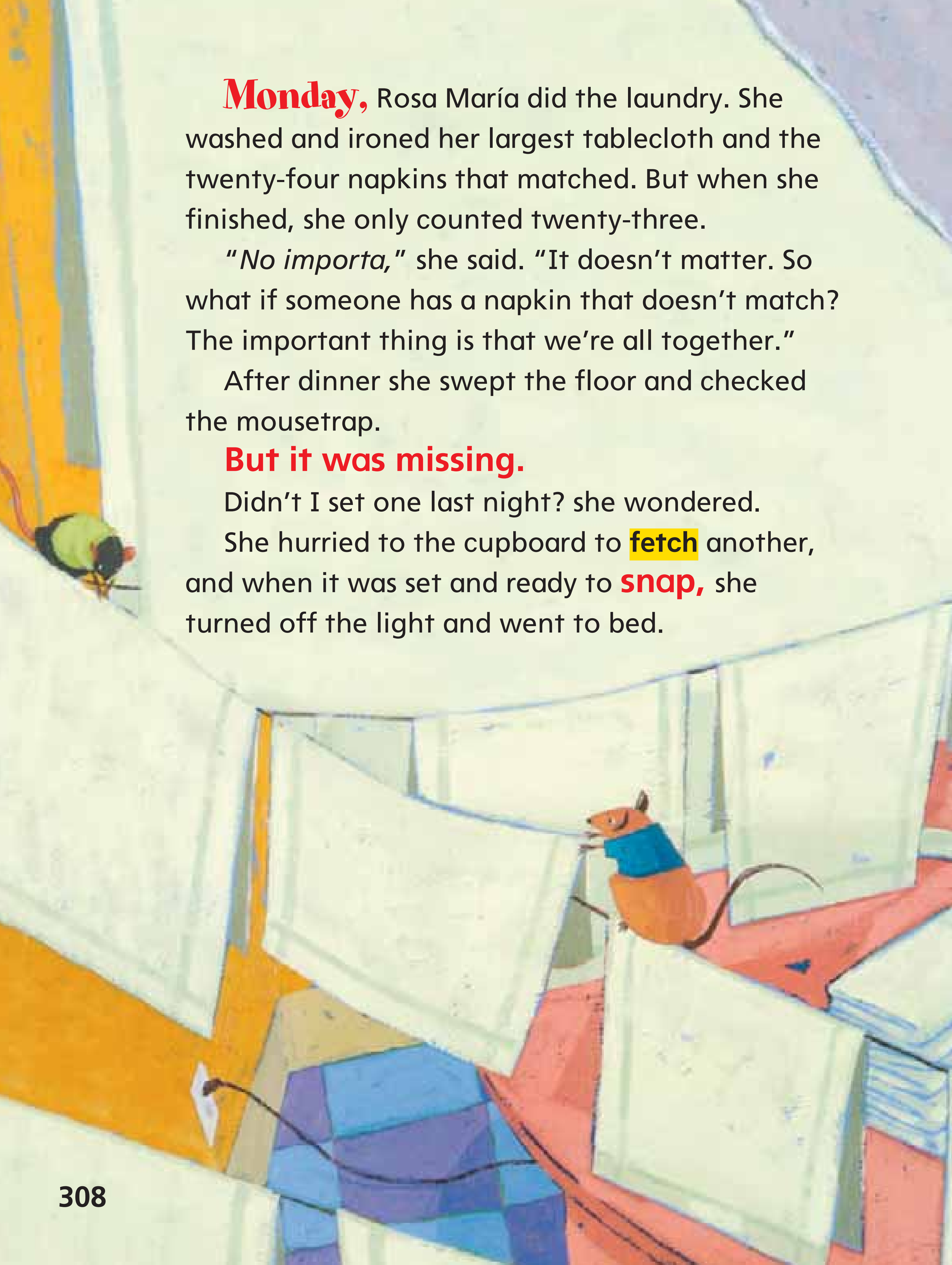
"*No importa,*" she said. "It doesn't matter. So what if someone has a napkin that doesn't match? The important thing is that we're all together."

After dinner she swept the floor and checked the mousetrap.

But it was missing.

Didn't I set one last night? she wondered.

She hurried to the cupboard to **fetch** another, and when it was set and ready to **snap,** she turned off the light and went to bed.



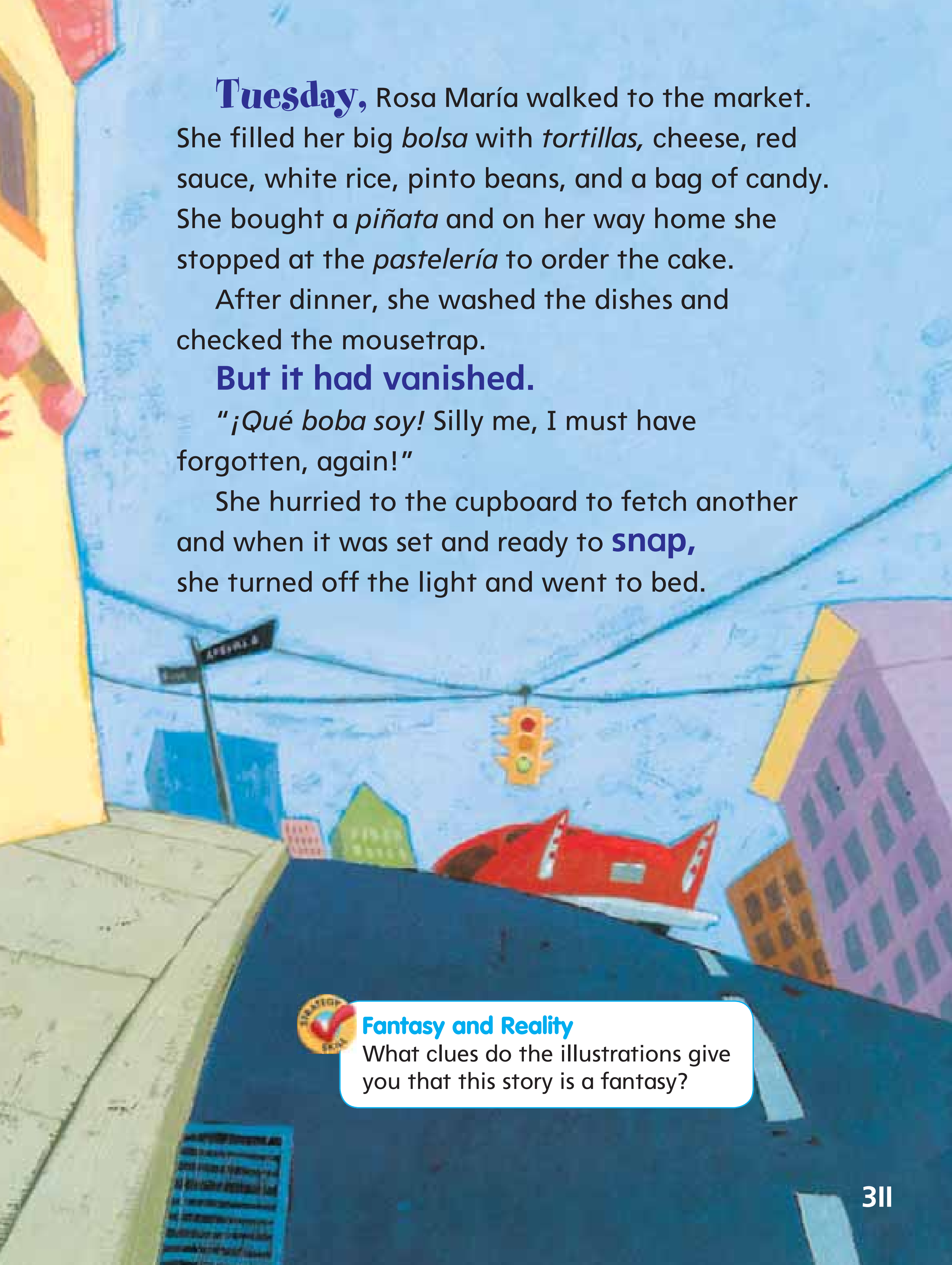
Tuesday, Rosa María walked to the market. She filled her big *bolsa* with *tortillas,* cheese, red sauce, white rice, pinto beans, and a bag of candy. She bought a *piñata* and on her way home she stopped at the *pastelería* to order the cake.

After dinner, she washed the dishes and checked the mousetrap.

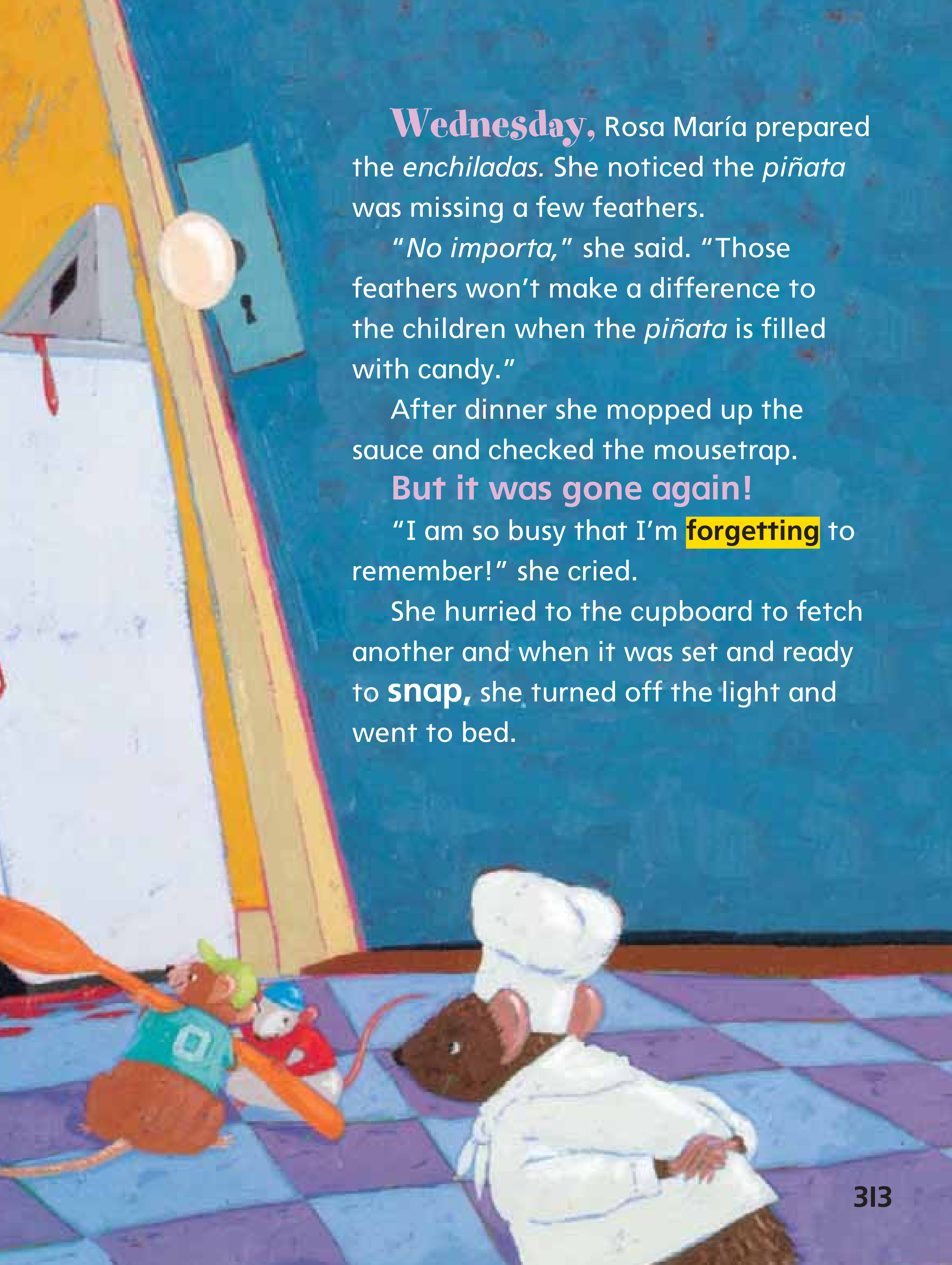
But it had vanished.

"*¡Qué boba soy!* Silly me, I must have forgotten, again!"

She hurried to the cupboard to fetch another and when it was set and ready to **snap,** she turned off the light and went to bed.



Fantasy and Reality
What clues do the illustrations give you that this story is a fantasy?



Wednesday, Rosa María prepared the *enchiladas.* She noticed the *piñata* was missing a few feathers.

"*No importa,*" she said. "Those feathers won't make a difference to the children when the *piñata* is filled with candy."

After dinner she mopped up the sauce and checked the mousetrap.

But it was gone again!

"I am so busy that I'm **forgetting** to remember!" she cried.

She hurried to the cupboard to fetch another and when it was set and ready to **snap,** she turned off the light and went to bed.

Thursday, Rosa María simmered the beans. She searched for her favorite wooden spoon, the one she always used to cook *frijoles,* but she couldn't find it.

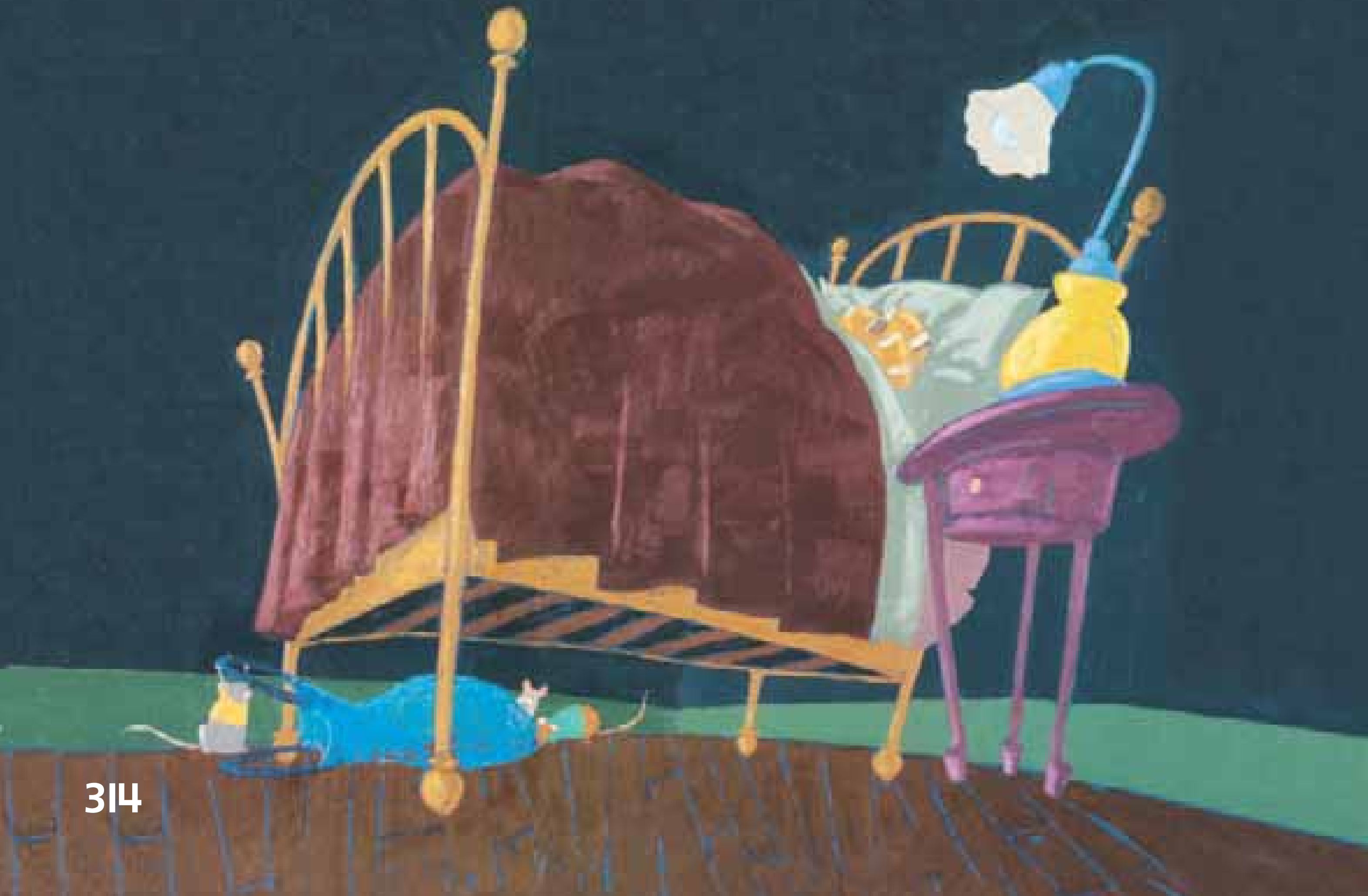
"*No importa,*" she said. "The beans will taste just as good if I use another spoon."

She added water all day long until the beans were plump and soft. Then she scrubbed the stove and checked the mousetrap.

But it was nowhere in sight!

"*¡Cielos!*" she said. "Heavens! Where is my mind?"

She hurried to the cupboard to fetch another and when it was set and ready to **snap,** she turned off the light and went to bed.



Friday, Rosa María picked up the cake and seven candles.

Tomorrow was the big day. Rosa María knew she mustn't forget anything, so she carefully went over the list one last time.

After dinner she wrapped the cake and checked the mousetrap.

She couldn't believe her eyes.

No mousetrap!

"Thank goodness I've got plenty."

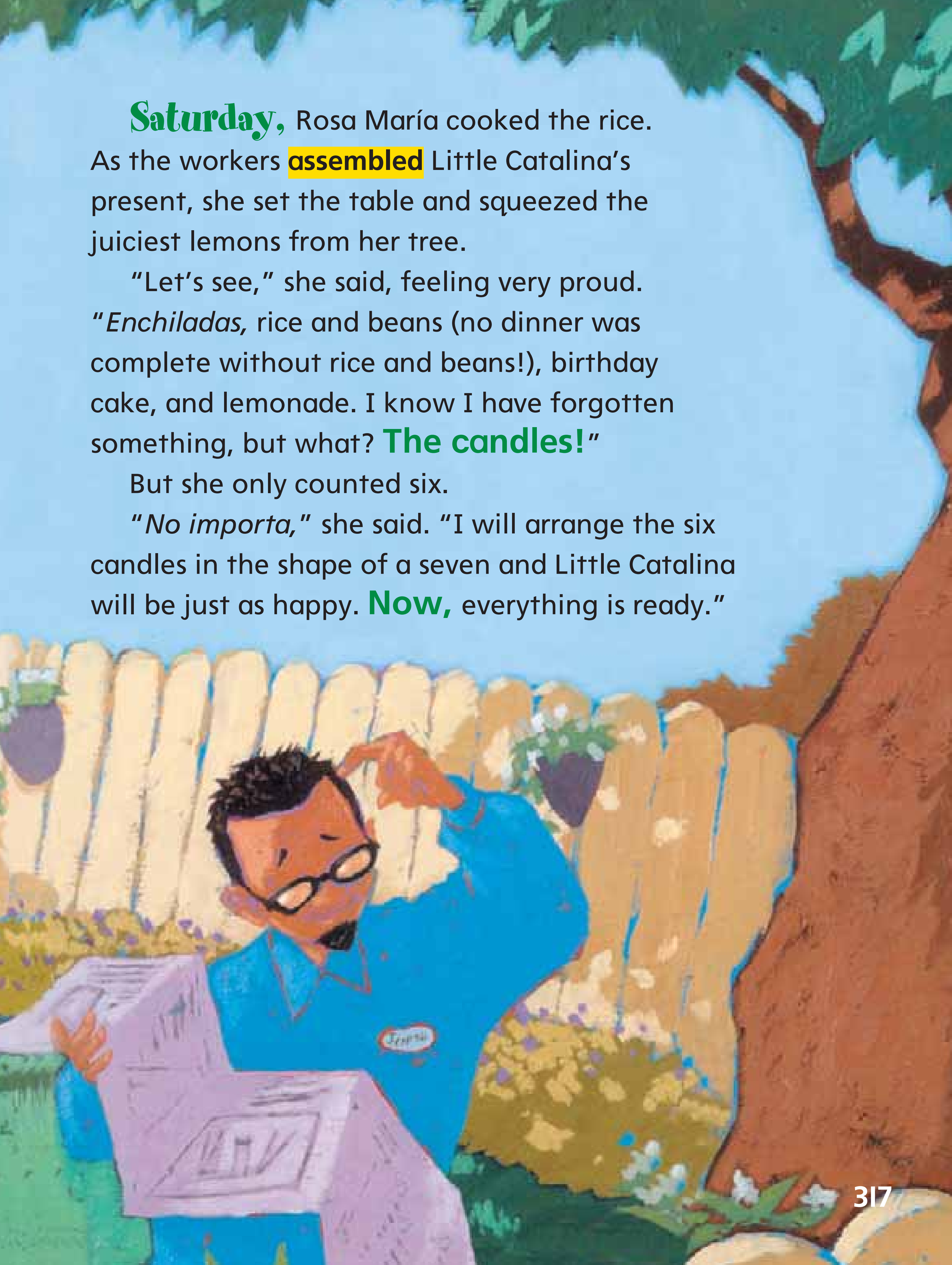
She hurried to the cupboard to fetch another and when it was set and ready to **snap,** she turned off the light and went to bed.

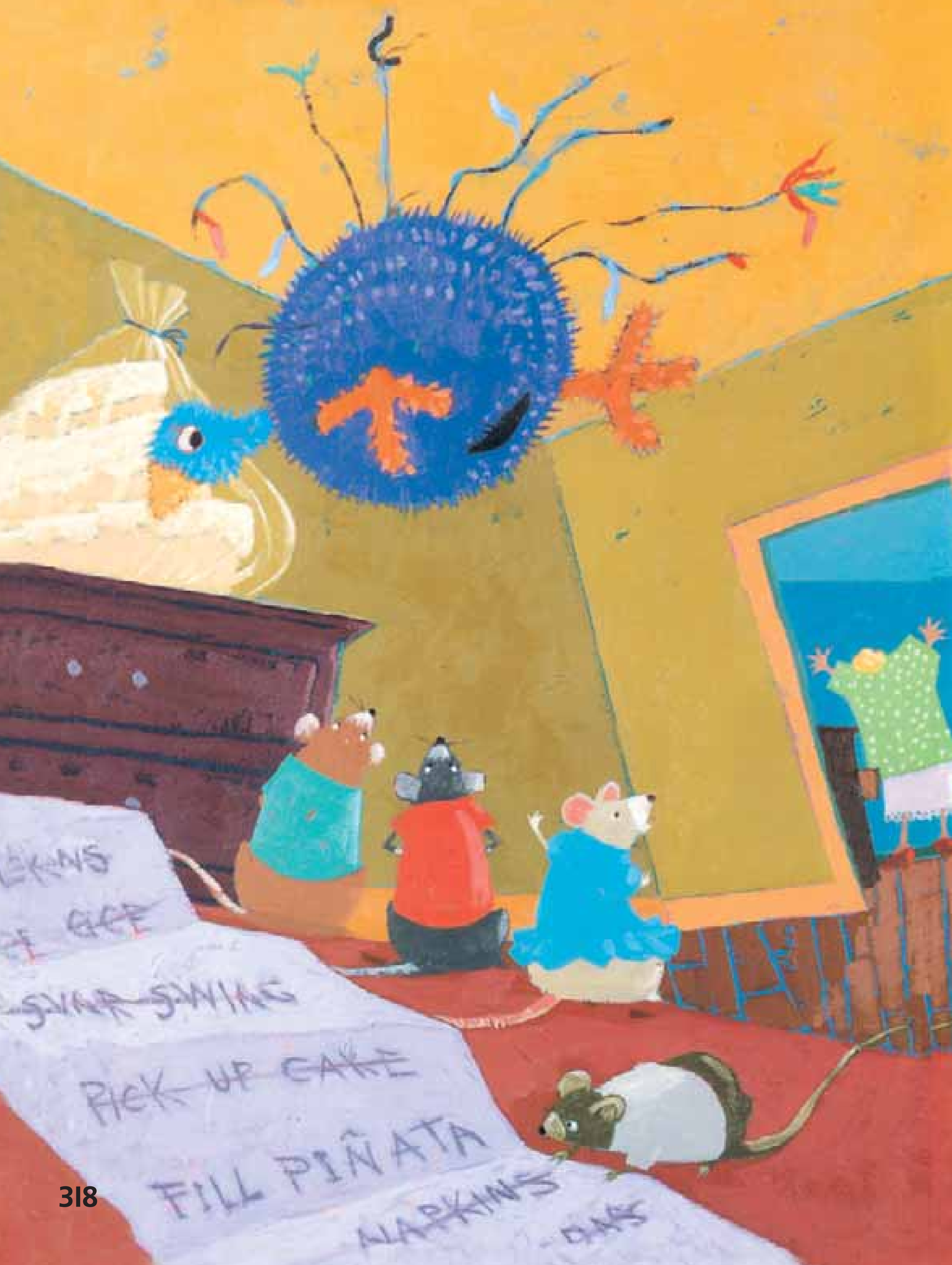
Saturday, Rosa María cooked the rice. As the workers **assembled** Little Catalina's present, she set the table and squeezed the juiciest lemons from her tree.

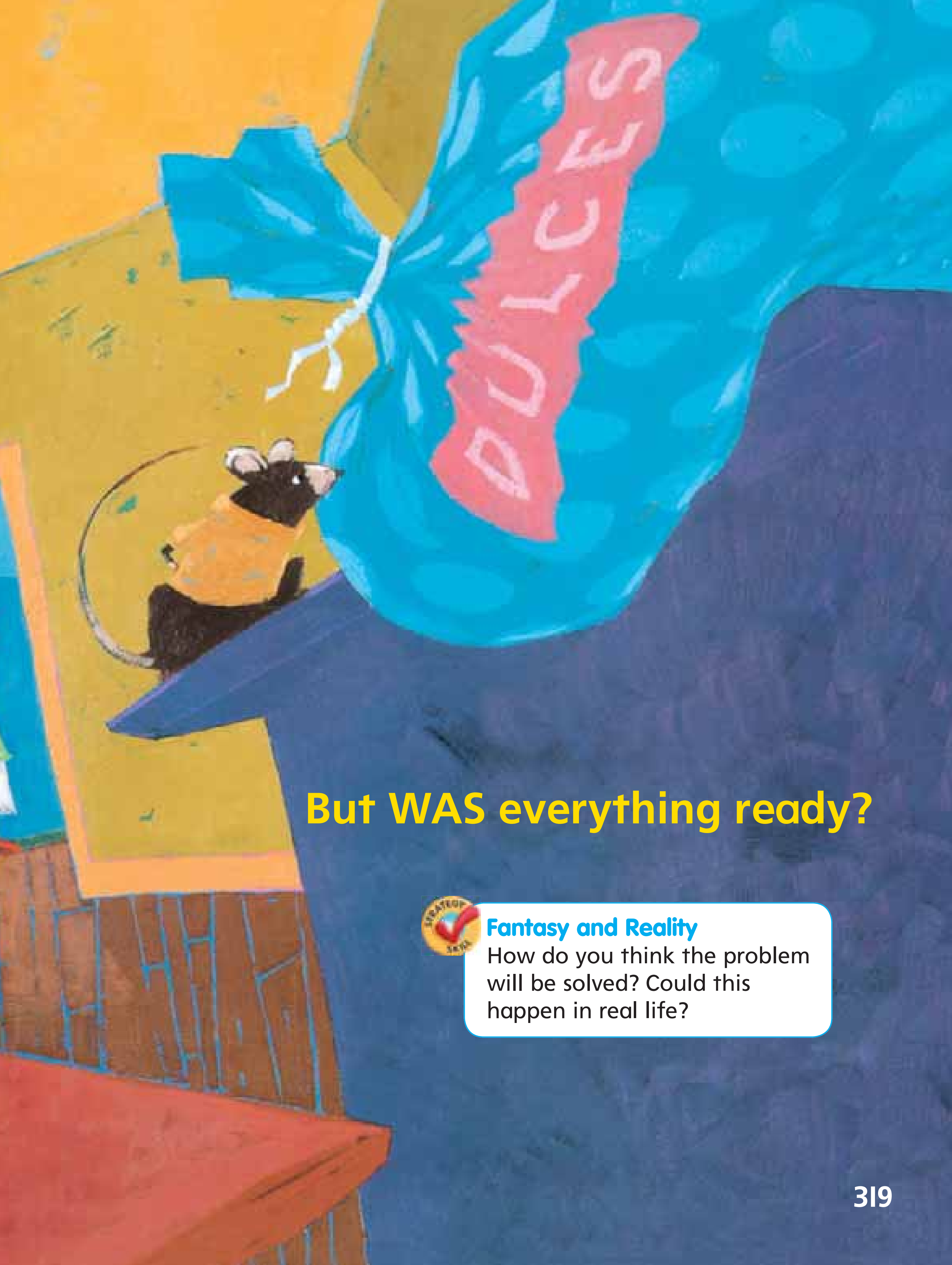
"Let's see," she said, feeling very proud. "*Enchiladas,* rice and beans (no dinner was complete without rice and beans!), birthday cake, and lemonade. I know I have forgotten something, but what? **The candles!**"

But she only counted six.

"*No importa,*" she said. "I will arrange the six candles in the shape of a seven and Little Catalina will be just as happy. **Now,** everything is ready."

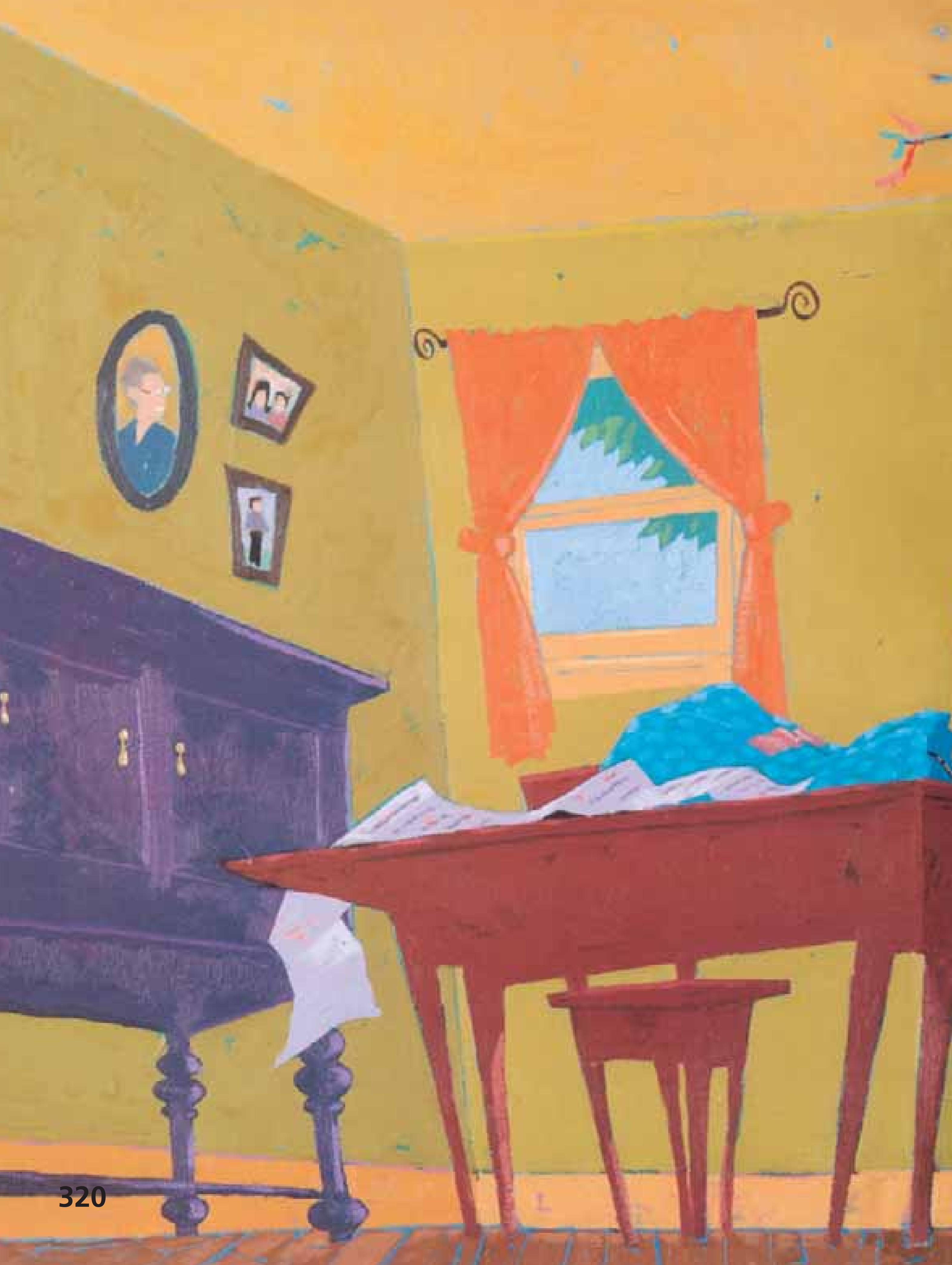



~~PICK UP CAKE~~
FILL PIÑATA
~~NAPKINS~~



But WAS everything ready?

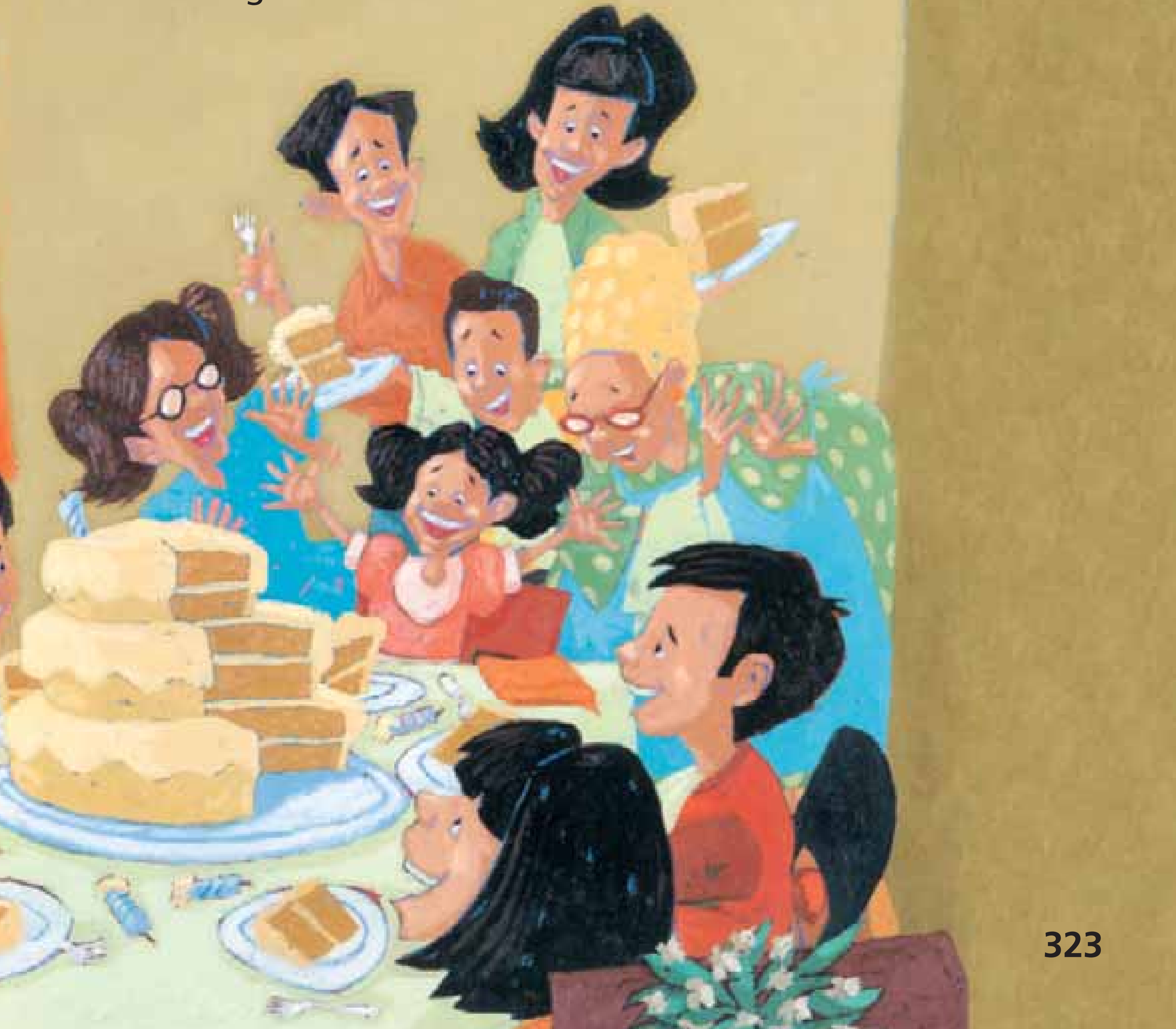
Fantasy and Reality
How do you think the problem will be solved? Could this happen in real life?



That afternoon Rosa María's family filled her tiny *casita.* They ate the *enchiladas* and rice and beans. They drank the fresh-squeezed lemonade. And they **devoured** the cake.

Little Catalina loved her present—a swing set! And after every cousin had a turn, they chanted, "*¡La piñata! ¡La piñata!*"

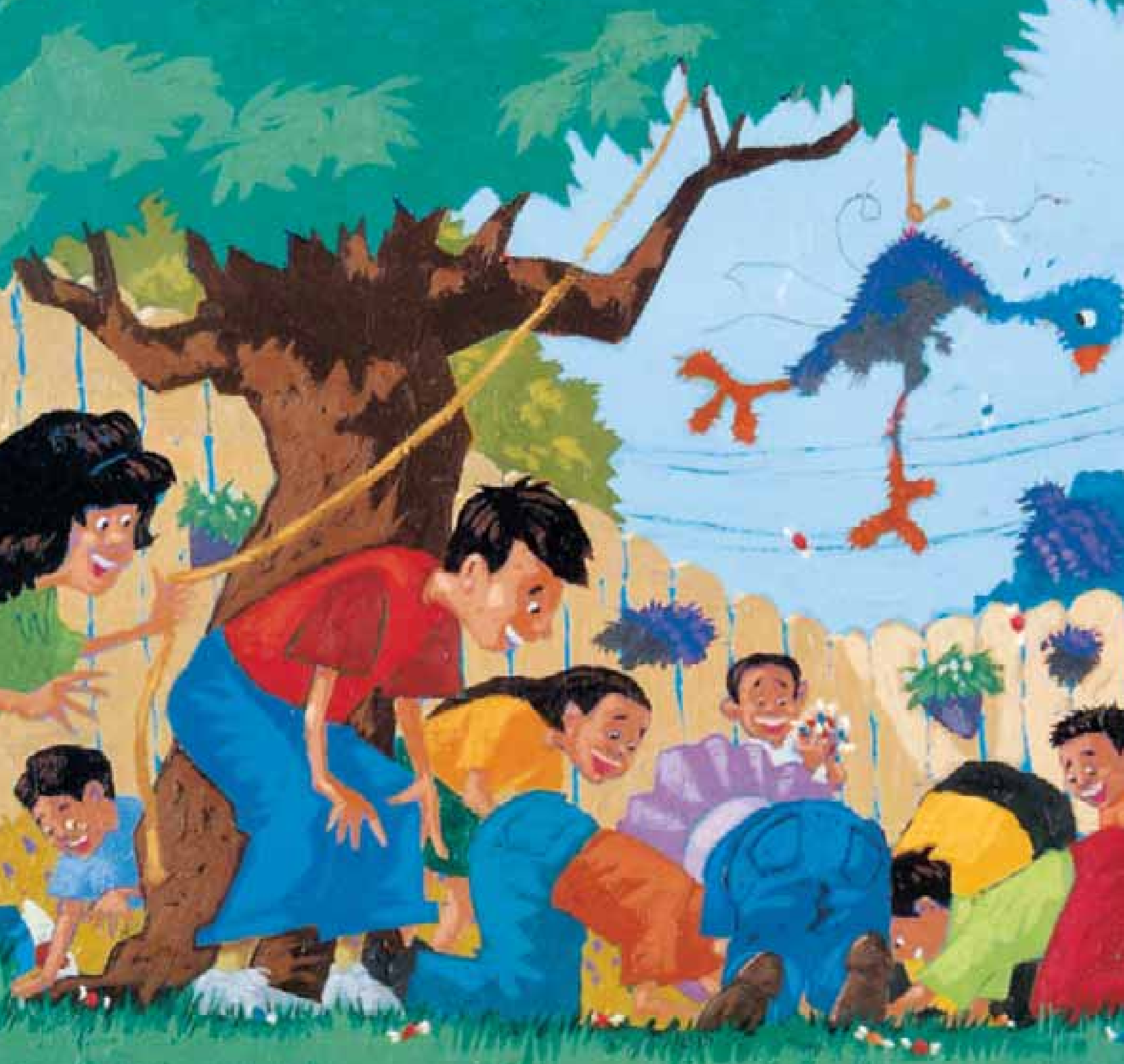
They ran to the walnut tree and threw a rope over a high branch.



Whack! Whack! Little Catalina swung the *piñata* stick.

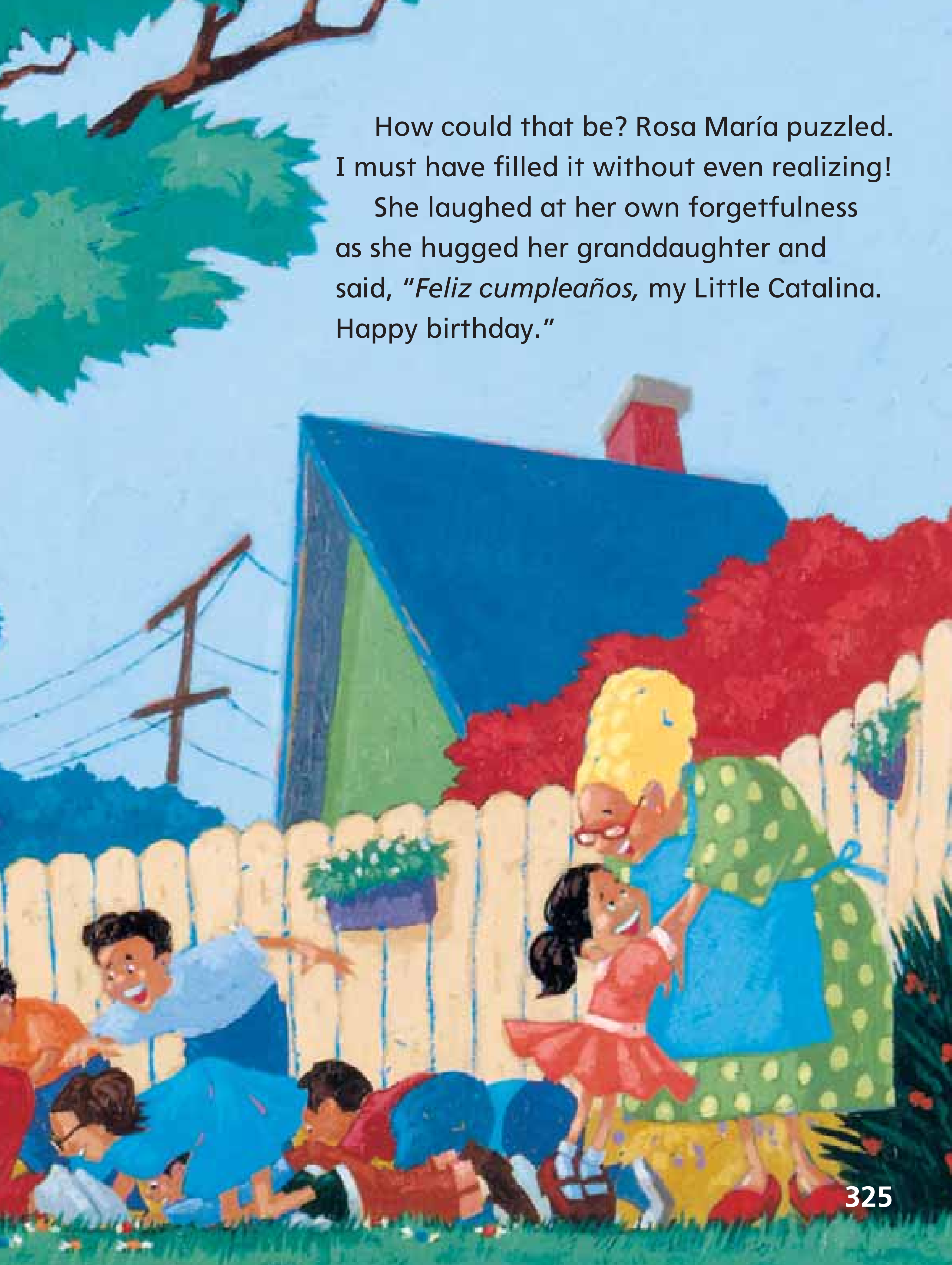
"Wait!" cried Rosa María as she remembered what she'd forgotten. But it was too late.

Crack! The *piñata* separated, and the children scrambled to collect the candy.



How could that be? Rosa María puzzled. I must have filled it without even realizing!

She laughed at her own forgetfulness as she hugged her granddaughter and said, "*Feliz cumpleaños,* my Little Catalina. Happy birthday."



After everyone had gone, Rosa María tidied her kitchen and thought contentedly about the *fiesta.* She pictured the happy look on Little Catalina's face when the candy spilled from the *piñata.* But Rosa María still couldn't remember when she had filled it.

"*No importa,*" she said. "It was a wonderful day."

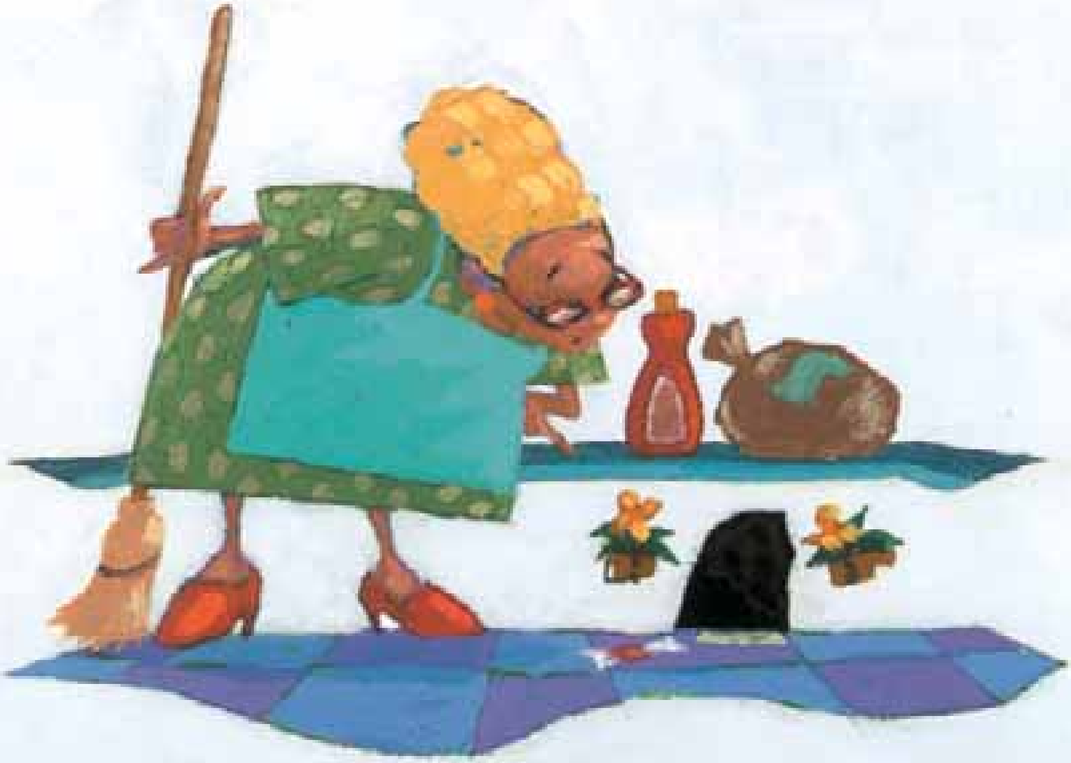
But as Rosa María swept out the cupboard, she discovered the telltale signs of mice!

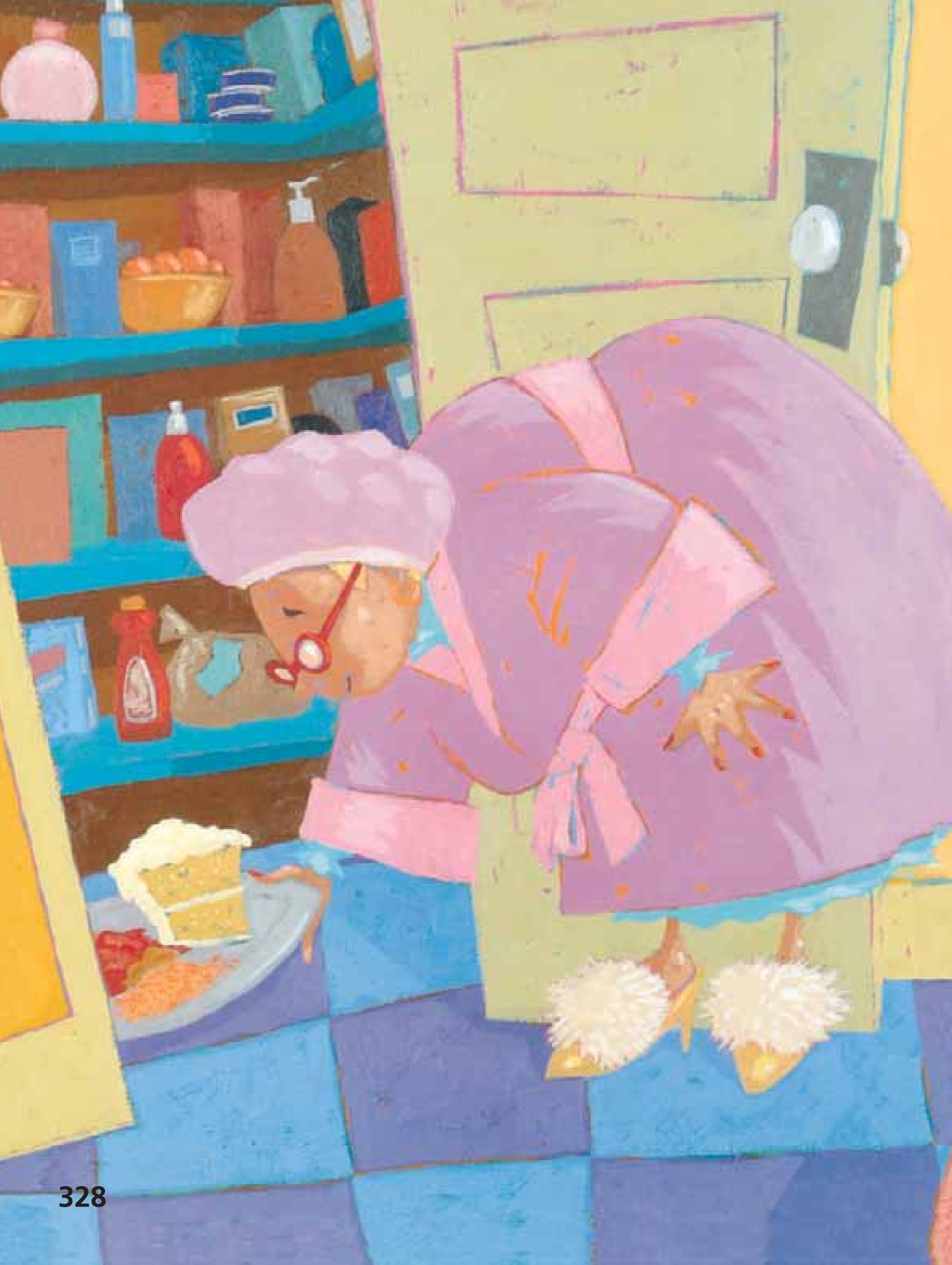
"***¡Ratones!***" she cried. "Where are my mousetraps? I will set them all!"

She inched to the floor and when she did, something caught her eye.

She looked closer.

Maybe I **didn't** fill the *piñata,* she thought.





"Was it possible?" she asked, shaking her head. "Could I have had help?"

Rosa María looked at the leftovers. Too much for one person.

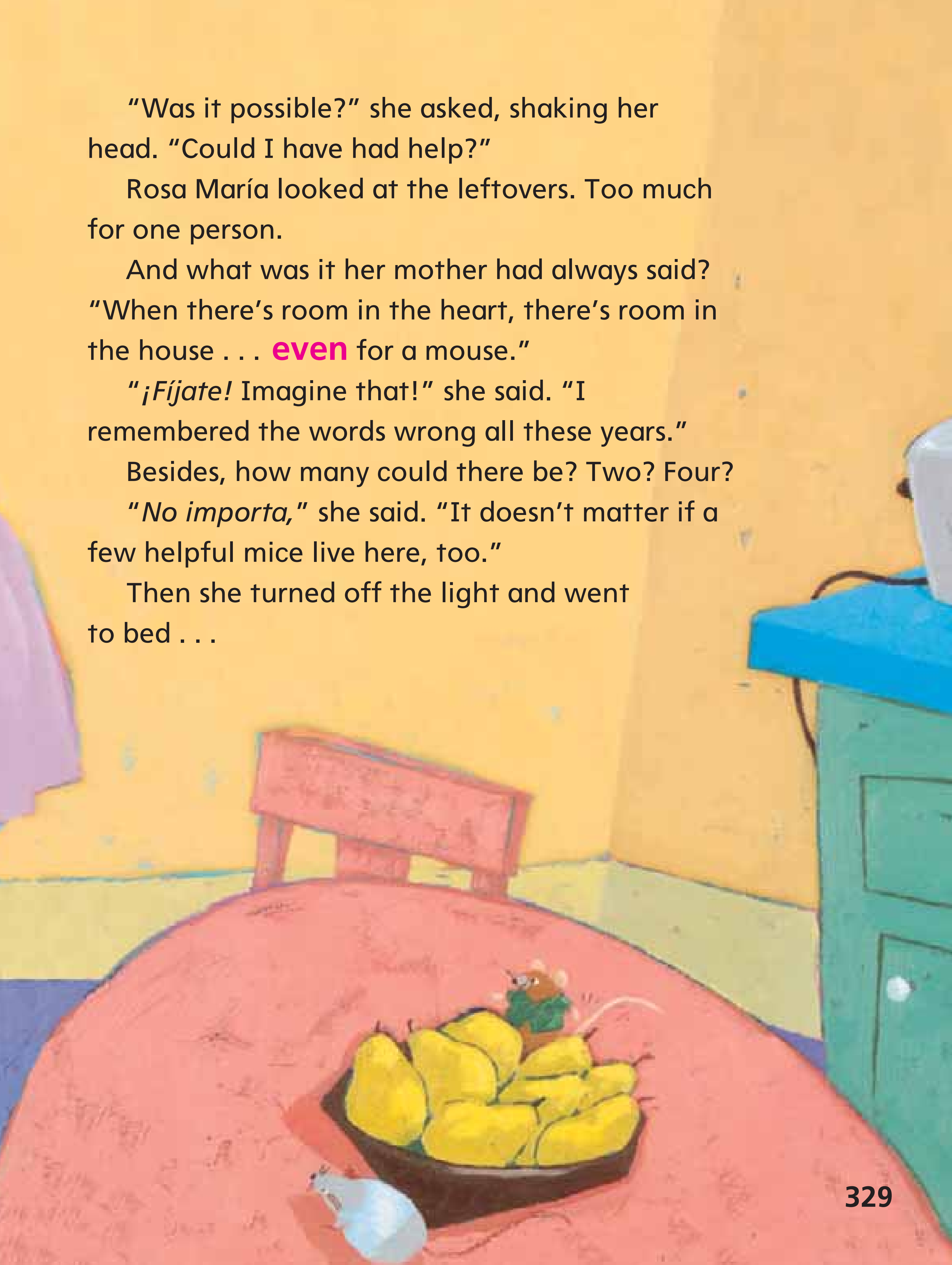
And what was it her mother had always said? "When there's room in the heart, there's room in the house . . . **even** for a mouse."

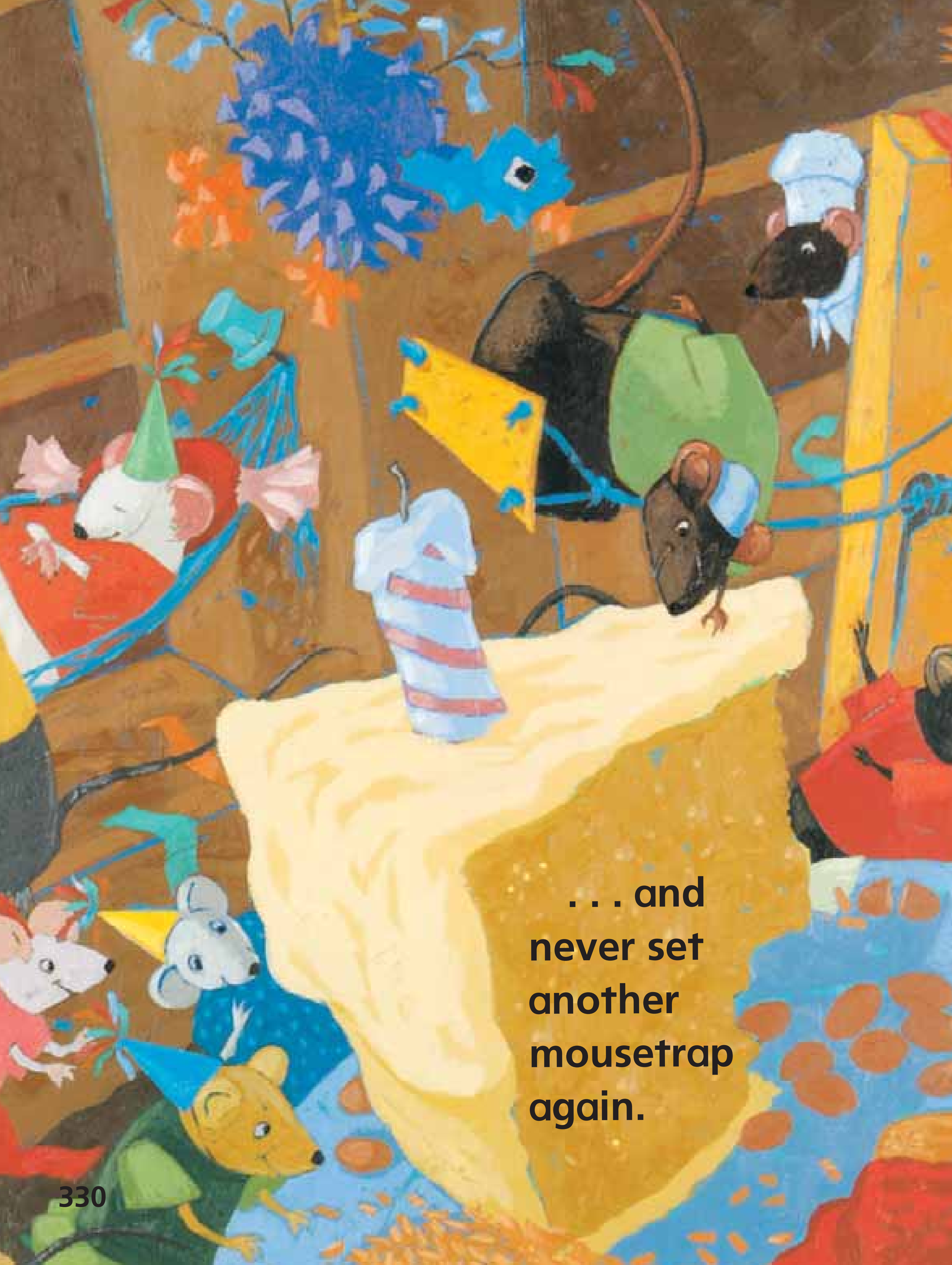
"*¡Fíjate!* Imagine that!" she said. "I remembered the words wrong all these years."

Besides, how many could there be? Two? Four?

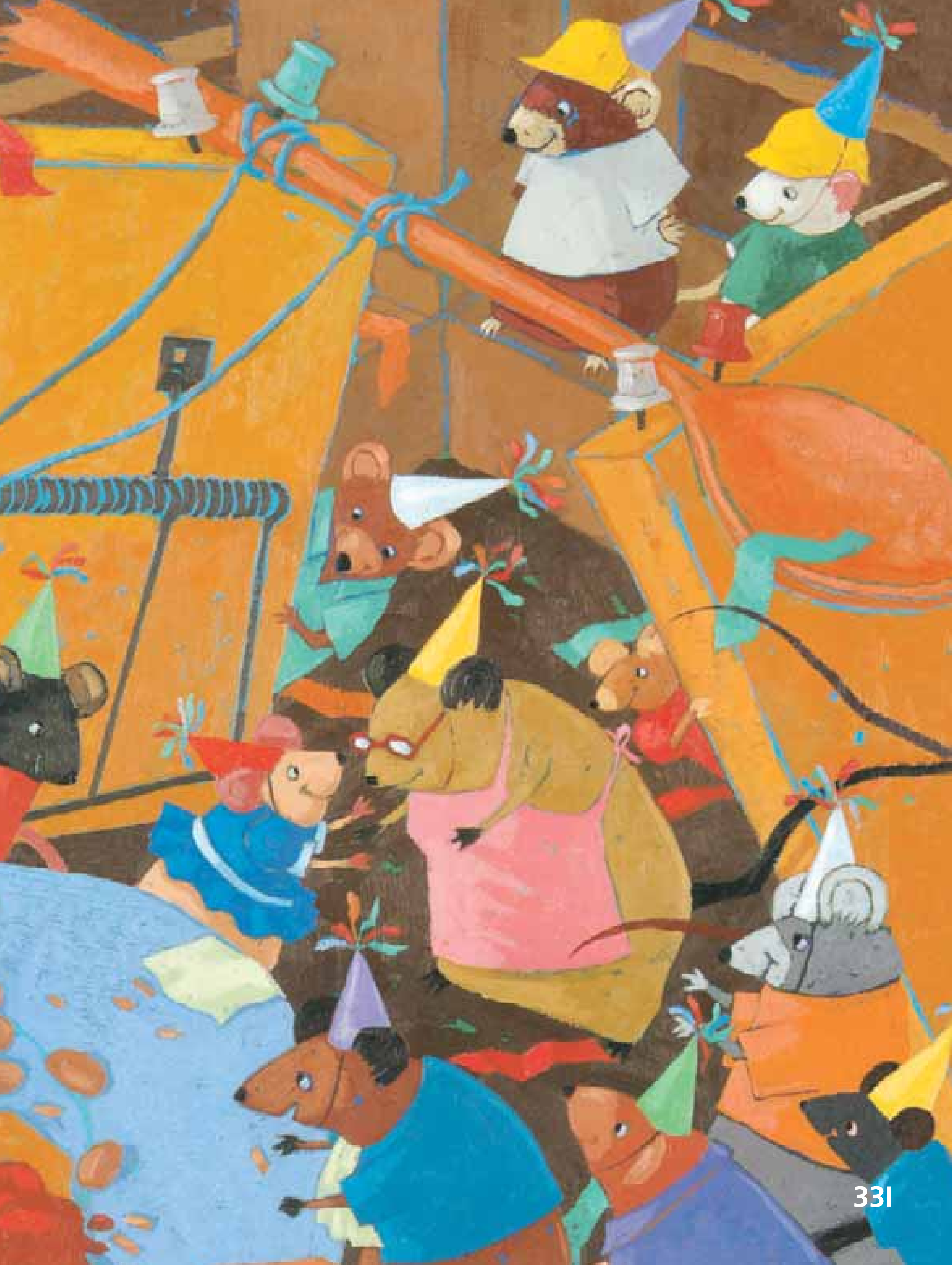
"*No importa,*" she said. "It doesn't matter if a few helpful mice live here, too."

Then she turned off the light and went to bed . . .





. . . and never set another mousetrap again.

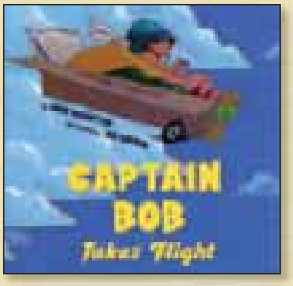


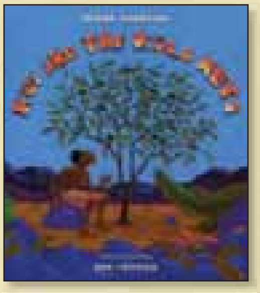
Celebrating with Joe Cepeda

Joe Cepeda says that many parties from his childhood looked just like the one in this book. For his son's parties, Joe always finds a special piñata. He has even made a hand-painted piñata stick. He hopes it will become a part of their family traditions.

Joe has received many awards for *Mice and Beans*. He has illustrated more than 15 other children's books. He also does artwork for magazines, newspapers, and businesses.

Other books illustrated by Joe Cepeda





LOG ON Find out more about Joe Cepeda at **www.macmillanmh.com**

Illustrator's Purpose

Joe Cepeda remembered the parties he went to as a child. He wanted to include a lot of details in his art for this story about a party. What kinds of parties do you like? Write about what you like to do at parties.

Comprehension Check

Retell the Story

Use the Retelling Cards to retell the story.

Retelling Cards

Think and Compare

Reality	Fantasy
What Could Happen?	What Could Not Happen?

1. Which parts of this story could happen in real life? Which could not? How do you know? **Story Structure: Fantasy and Reality**

2. Reread pages 306–309. Look at the pictures. How do the pictures help you know that Rosa María is not really **forgetting** and losing things? **Analyze**

3. Describe the special foods or activities that you have at family gatherings. **Analyze**

4. Why do you think some people like to celebrate by having parties? **Evaluate**

5. Compare “Bobo’s Celebration” on pages 300–301 to *Mice and Beans*. What do both parties have in common? **Reading/Writing Across Texts**

Math

Genre

Recipes give you the information and steps needed to make a food or drink.

Text Feature

Written Directions are steps that tell you how to make or do something.

Content Vocabulary

tablespoons

cup

ounce

Rosa María's Rice and Beans

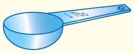
In *Mice and Beans*, Rosa María made rice and beans to celebrate Little Catalina's birthday. When cooking, it's important to pay close attention to the numbers and measurements in recipes. Reading the directions carefully and using the right amounts of ingredients will help you create a delicious meal. Try making Rosa María's rice and beans for your next celebration.

Safety Note

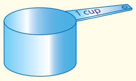
Have an adult help you with this recipe.

Rice

2 **tablespoons** vegetable oil



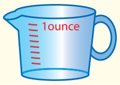
$\frac{1}{3}$ **cup** minced onion



$\frac{1}{3}$ cup minced bell pepper

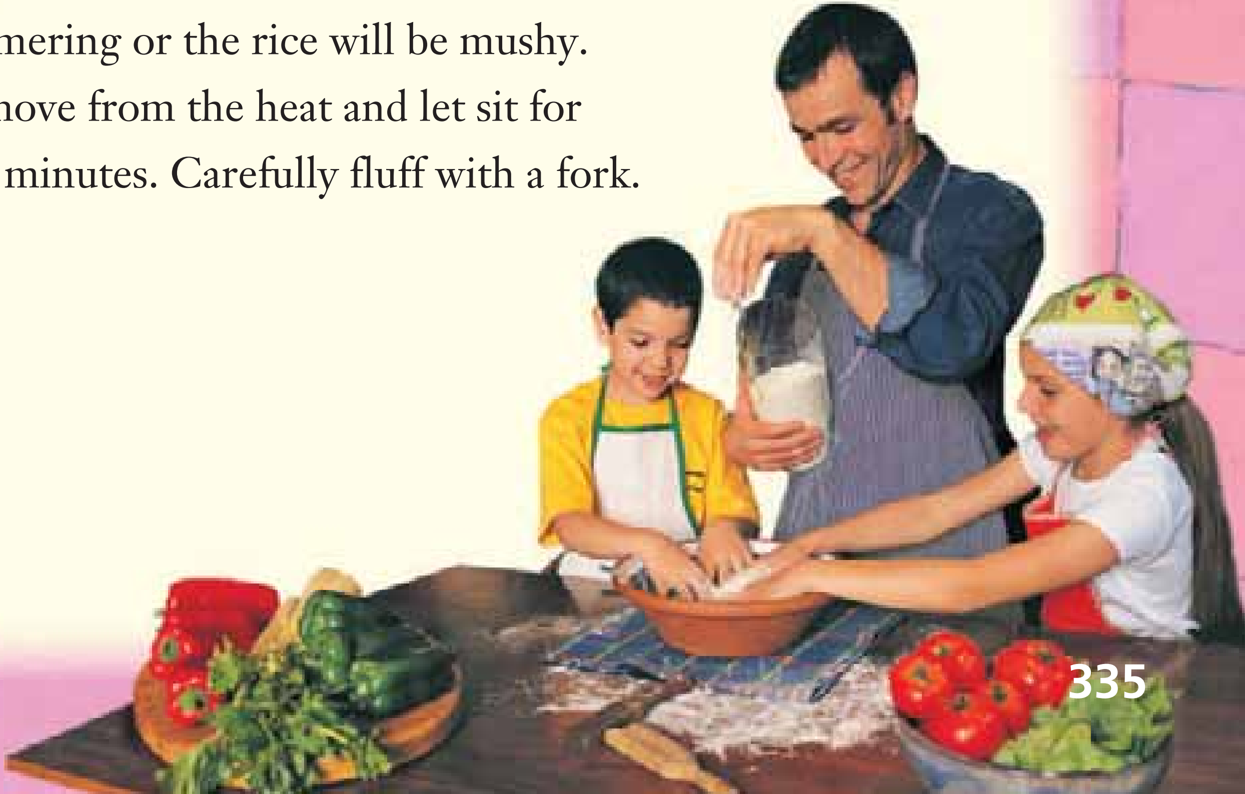
$1\frac{1}{2}$ cups long grain white rice

1 $14\frac{1}{2}$-**ounce** can chicken or vegetable broth



$\frac{1}{4}$ cup tomato sauce stirred into $1\frac{1}{2}$ cups of water

1. Pour the oil into a large skillet.
2. Add the onion, bell pepper, and rice. Sauté (SAW-tay), or fry, over medium heat until rice is lightly toasted.
3. Add the broth and tomato sauce water. Bring to a boil.
4. Cover, and turn the heat to low.
5. Simmer for 20 to 25 minutes, or until the liquid has been soaked up. Do not stir while simmering or the rice will be mushy.
6. Remove from the heat and let sit for five minutes. Carefully fluff with a fork.



CHICKEN BROTH
chicken
broth

Beans

1 16-ounce bag dried pinto beans

1 large onion, chopped

4 cloves garlic, minced

2 $14\frac{1}{2}$-ounce cans chicken or vegetable broth

2 $14\frac{1}{2}$-ounce soup cans water

salt and pepper, add to taste

1. Follow the directions on the back of the bag for cleaning and soaking the beans.
2. Drain water.
3. Combine beans, onion, garlic, broth, and water in a large pot. Bring to a boil.
4. Reduce heat to low and simmer for $2\frac{1}{2}$ to 3 hours. Stir often until beans are plump and soft.

Serve the rice and beans in a bowl, side-by-side. You can add sour cream, salsa, grated cheese, and avocado slices. Or, roll everything into a flour tortilla for a delicious burrito!

Connect and Compare

1. What should you do to the beans while they are simmering? **Written Directions**
2. Think about the recipes and *Mice and Beans*. Rosa María planned a menu for the party. Write a menu that includes the food you would like to have at a party. **Reading/Writing Across Texts**

Math Activity

These recipes have fractions in the ingredients. List two or three fractions and draw a picture that shows how much each is.

LOG ON Find out more about fractions at **www.macmillanmh.com**

WRITE A FLYER

Writer's Craft

Vary Words

Strengthening and **varying word choices** help make writing clear. Adjectives are descriptive words that can make writing more exact.

I varied the adjectives to describe the activities and food that will be at Field Day.

I strengthened the word choices on the flyer to tell about Field Day.

Community Field Day!

The annual Washington Elementary School Field Day will take place on June 18.

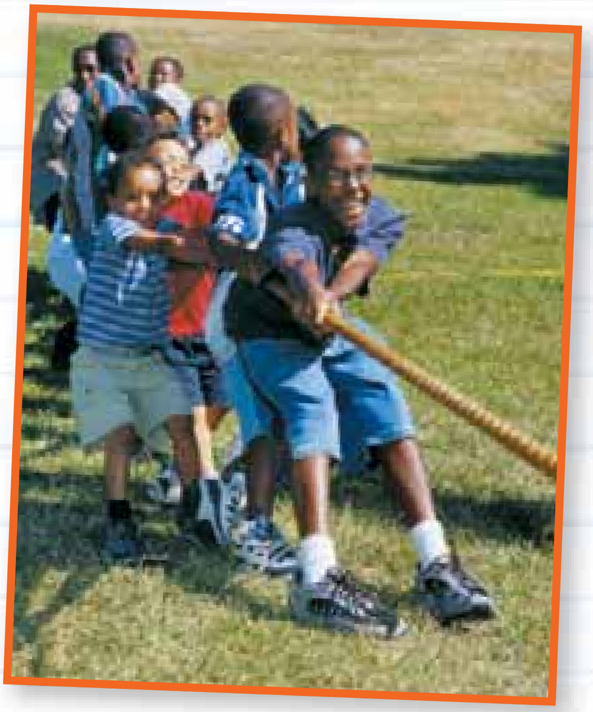
Please join us for a day filled with thrilling activities and terrific food. The fun starts at 1p.m. at the school's football field.

This event is open to all students and their families. Come take part in exciting sack races, a water balloon toss, and an obstacle course! A picnic will follow the games.

Contact Ms. Cahill for more information.

Your Turn

Write a flyer or a poster about an event. The event can be something real or something imaginary. Tell what will happen at the event. Describe where the event will take place. Then use the Writer's Checklist to check your writing.



Writer's Checklist

☐ **Word Choice:** Did I strengthen and vary word choices to describe the event?

☑ **Organization:** Is my flyer written so it is easy to find out when the event will take place and who to contact about it?

☑ **Conventions:** Did I use adjectives to give details about the event?

☑ **Conventions:** Is all my spelling, capitalization, and punctuation correct?

Your Turn

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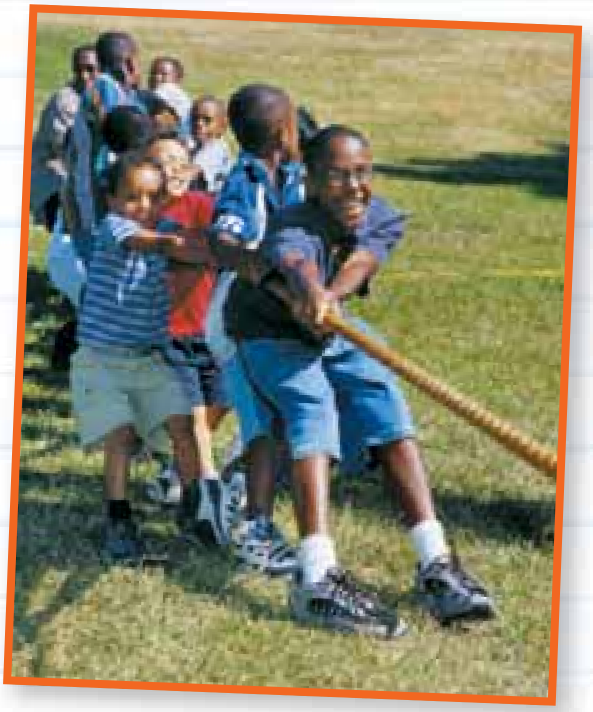

Writer's Checklist

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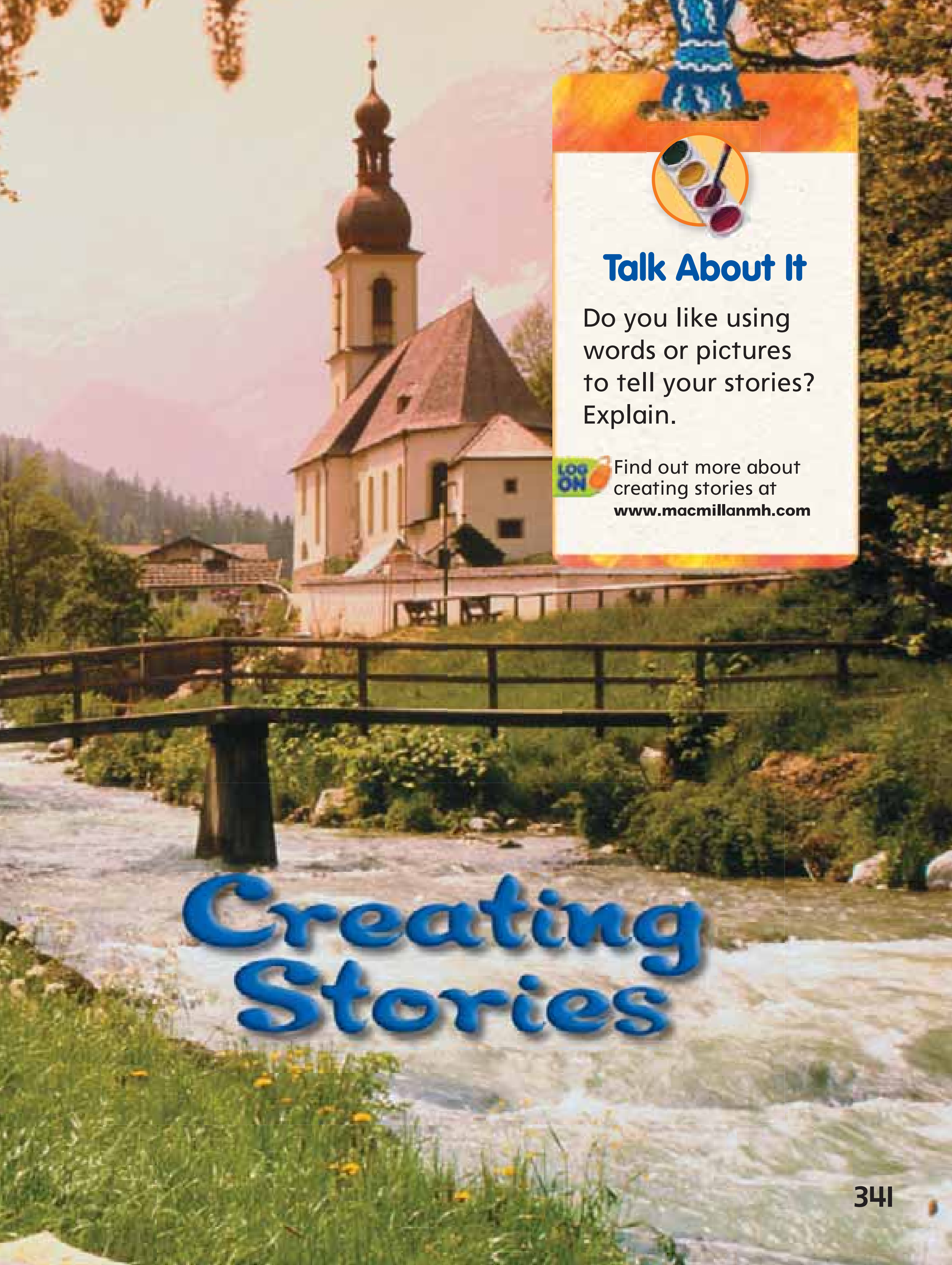
- ☑ **Conventions:** Did I use adjectives to give details about the event?
- ☑ **Conventions:** Is all my spelling, capitalization, and punctuation correct?



Creating Stories

Talk About It

Do you like using words or pictures to tell your stories? Explain.

LOG ON Find out more about creating stories at **www.macmillanmh.com**

Vocabulary

creating
familiar
occasions
memories
imagination
glamorous

Word Parts
Word **roots** and word parts can sometimes tell you the meaning of a new or unfamiliar word.

The word *imagination* comes from the Latin root *imag*. *Imag* means "likeness or picture."

Making Stories Happen

Illustrator Joe Cepeda

When you read a book, do you think that the illustrator and author worked together? Sometimes that happens. But **creating** books isn't always like that. In fact, the process of making a book might surprise you. Often the author and illustrator never even talk to each other!

Author Pam Muñoz Ryan

When writing a story, the author may give ideas about pictures to the illustrator. But sometimes the story is about something **familiar** to the illustrator, something that he or she has experienced in the past.

For example, *Mice and Beans* is about a party. Joe Cepeda remembered **occasions** when his family had parties. They were to celebrate special events. He used his **memories**, his thoughts of those past events, to draw the pictures. Illustrators also use their **imagination**. They picture in their minds how characters and settings might look.

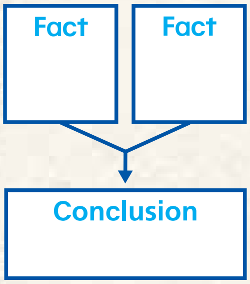
Being an author or illustrator may seem **glamorous**. It looks so interesting and exciting, but both jobs take a lot of hard work!

Reread for Comprehension

Story Structure

Draw Conclusions

Reading an article and using what you know from real life can help you make decisions, or draw conclusions, about the article's topic. Use the chart as you reread to draw conclusions about authors and illustrators.



Comprehension

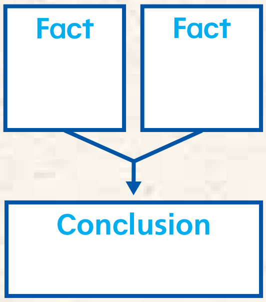
Genre

An **Autobiography** is a retelling of someone's life told by that person.

Make Inferences and Analyze

Draw Conclusions

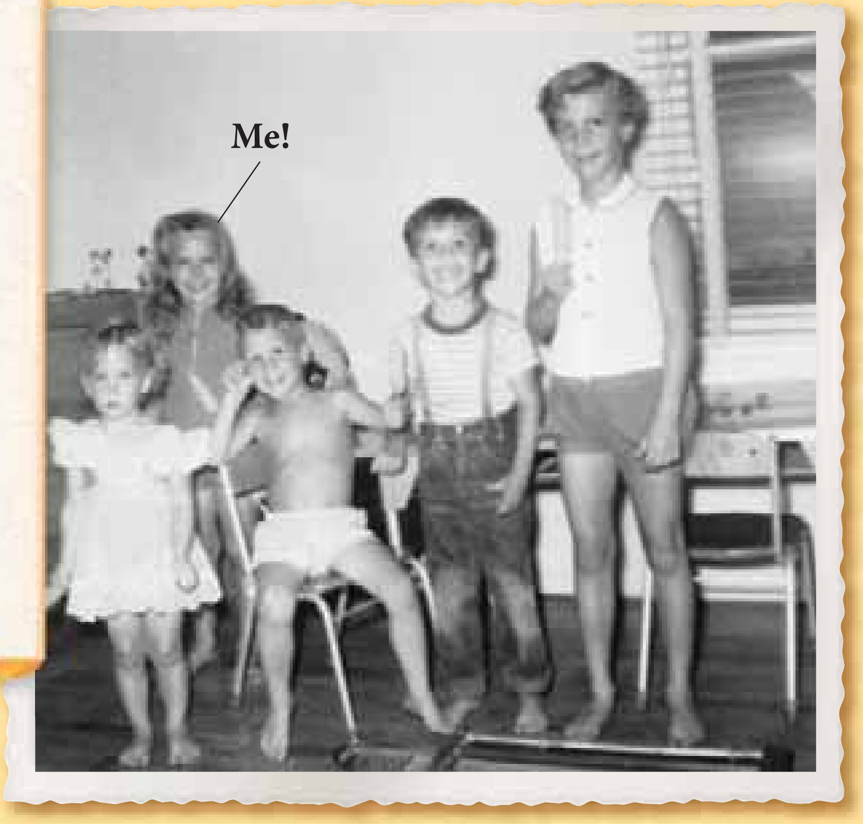
As you read, use the Conclusion Chart.



Read to Find Out

How does the author use her own life to write stories?

I moved into this house when
I was four years old.



I had a lot of great friends growing up.

Stirring Up Memories

by
Pam Muñoz Ryan

Here I am with my favorite doll!

McKINLEY SCHOOL

My third-grade class was very big. I'm sitting in the middle and wearing a plaid dress.

Growing Up

I grew up in the San Joaquin (wah-keen) Valley in Bakersfield, California. This area is known for its hot, dry summers. It is often more than 100 degrees! When I was a young girl, I stayed cool by taking swimming lessons and eating ice pops. I also rode my bike to the library.

Bakersfield
California
Pacific Ocean

My friends and I liked to eat ice pops during the hot summers in California.

I loved the library for two important reasons. First, I could check out a pile of books and take them home with me. Second, the library was air-conditioned!

At my house, I was the oldest of three sisters. Next door to us, there lived another three girls. They were all younger than me, too. Whenever we played together, I was in charge of what we did. I was the director of the play, or the mom in a pretend family. Sometimes I was the doctor who saved their lives!

TICKET
ADMIT ONE
TICKET
TICKET
ADMIT ONE
TICKET

Here I am opening presents at my birthday party with my friends.

I was also the oldest of the 23 cousins in my family. When we had a family party at my grandmother's house, I was the boss again. I would say, "Let's pretend this is a circus or a school or a jungle . . . " Then I would tell everyone what they should do and say. I didn't know it at the time, but I was already **creating** stories!

I was about 17 years old at this family gathering. I'm second from the right in the back row, holding one of my baby cousins.

**This family party was at my uncle's house.
I'm sitting at the table wearing the black sweater.**

Some of my favorite **memories** are of those times at my grandmother's house. The kitchen always smelled like onions, garlic, and roasted peppers. There was often a big pot of beans on the stove. A pan of Spanish rice was cooking next to it.

When we were all together, it was crowded and noisy. Sound **familiar**? My story, *Mice and Beans*, is about a big family gathering and a grandmother who loves to cook!

Draw Conclusions
Why do you think Pam Muñoz Ryan's favorite memories are of her grandmother's house?

Finding an Idea

Readers always want to know where I get my ideas. I wish I could say that I go to an idea store and buy them. As far as I know, there is no such place.

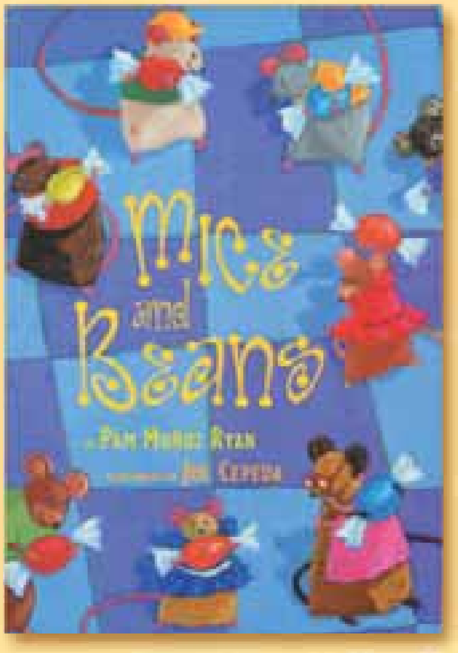
I like to visit schools. Children always ask me where I get the ideas for my books.

Mrs. Pam Muñoz Ryan

Real-life people like Eleanor Roosevelt (left) and Amelia Earhart (below) sometimes inspire me to write stories.

Amelia and Eleanor
Go for a Ride

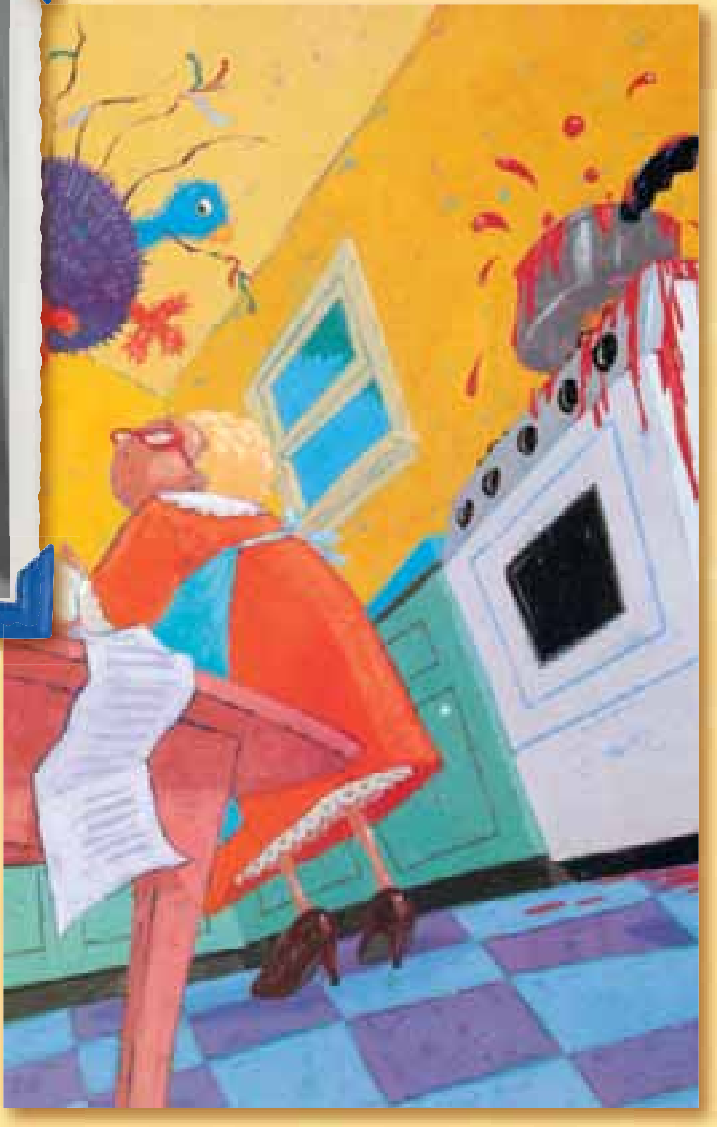
Sometimes my ideas come from something interesting I might have read about in a book. Sometimes they come from real life, like those times at my grandmother's house. Of course, the clever mice in *Mice and Beans* didn't come from real life. They came from my **imagination**.

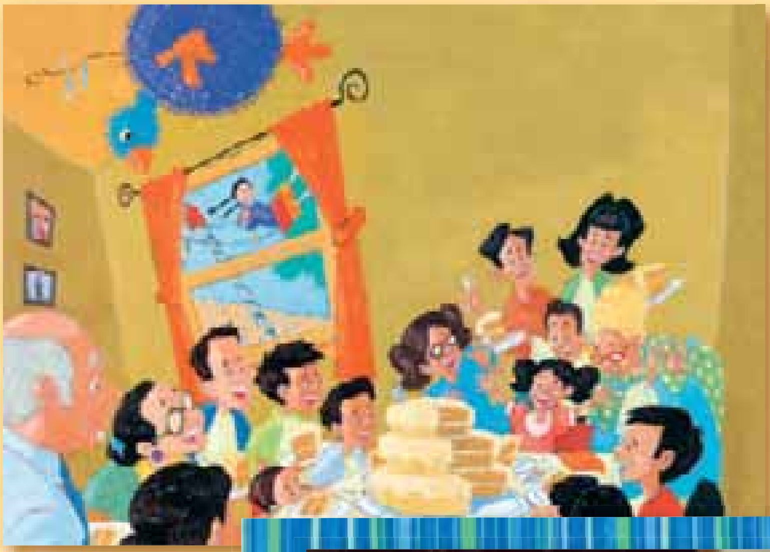

Mice and Beans
Pam Muñoz Ryan
Joe Cepeda

For *Mice and Beans,* I wanted to write a story about a grandmother getting ready for a big family party. I wondered what kind of party it could be.

I decided on a birthday party for the youngest grandchild. In my mind, I saw the grandmother preparing for a week. Each day, she would carefully clean her kitchen.

I thought of my grandmother, Esperanza, when I wrote *Mice and Beans*. In the photo above she is holding me when I was a baby.





Below is a picture of one of my own family parties. It is my son Tyler's birthday.

I wondered why my character was so tidy. Was she worried about ants? Or maybe mice? As I kept thinking, I imagined what it would be like if she already had mice but didn't know it. That idea made the story seem funnier to me. Then, one thing led to another.

That's what happens when I'm writing. I start out with one idea. Then, the more I think about it, the more choices I have for the story. Sometimes I try out different ideas on paper. Then I choose the one I like best.

Scoop Up
a
Good Book!

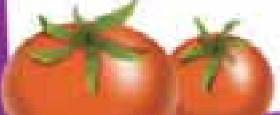
Now that I'm an adult, it's my turn to cook special foods for my friends and family to enjoy.

My Favorite Recipe

Salsa

2 large	tomatoes; seeded and chopped
1 to 2	chile peppers; seeded & chopped
1/3 c	chopped green onions
2 tb	chopped fresh cilantro
2 tb	lime juice
1/4 ts	salt

Combine all ingredients. Mix well and then cover. Refrigerate until serving time.



Once I've thought of an idea, it's time to start writing.

Many people think that writers look far away to find their stories. The truth is that most writers look within. They stir up memories and then sprinkle them with their imagination.

Draw Conclusions
Why do you think Pam Muñoz Ryan says that most writers look inside themselves for story ideas? Explain.

A Writer's Life

Readers often think that a writer's life is **glamorous** with fancy cars and clothes. For a very few, that might be true, but my life is much different than that.

I work at my home in California, near San Diego. I don't have to dress up to go to work. I don't take long train rides because my desk is in my house. I get up early, eat breakfast, and go straight to my office to write.

Working at home means I can walk from my breakfast table right to my office.

Sammie and Buddy keep me company when I want to work and when I want to play.

I have two friends who love to watch me work. They are my dogs, Buddy and Sammie. Almost every day, I take them for a walk, either in my neighborhood or on the beach.

For part of the year, the house is mostly quiet. My husband, Jim, and I have four children, two girls and twin boys. The girls are grown up now, but the boys are still in college. They come home during the summer. Since we live near the Pacific Ocean, there is a lot of going back and forth to the beach.

My husband, Jim, and I enjoy taking Buddy and Sammie to the beach.

Many of my favorite memories are of times spent at home.

My childhood home

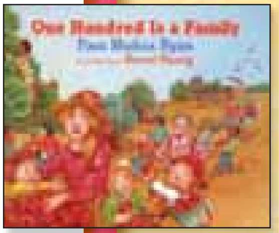
Today when my children are all together in our house for family **occasions**, it is crowded and noisy. It's just like when I was a little girl. Sometimes I even cook rice and beans! During these times, we're creating new memories. Maybe someday they'll give me the idea for another story!

Stirring Up Ideas with Pam Muñoz Ryan

Pam Muñoz Ryan likes to visit classrooms. Children often ask her how to become a writer. “If you want to be a writer, first become a reader,” Pam says. “Daydream every day and pretend often. That’s where ideas live—in your imagination. If you think of a story, write it down and save it. Someday, it might be the seed that grows into something magnificent.”

Other books written by Pam Muñoz Ryan

HELLO OCEAN



LOG ON Find out more about Pam Muñoz Ryan at **www.macmillanmh.com**

Author’s Purpose

Pam Muñoz Ryan wanted to write about what she did during the summer when she was a girl. Write about what you like to do in the summer.

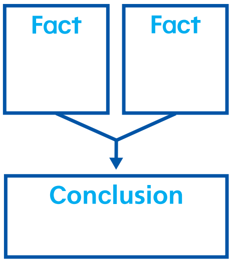
Comprehension Check

Retell the Story

Use the Retelling Cards to retell the selection.

Retelling Cards

Think and Compare



1. Why is this story titled *Stirring Up Memories*? **Story Structure: Draw Conclusions**
2. Reread page 348. What are some things that Pam enjoyed doing as a child that she still loves to do as an adult? **Apply**
3. Would you like to be a writer? Why or why not? **Evaluate**
4. Why might some people think that being a writer is **glamorous**? **Synthesize**
5. Read "Making Stories Happen" on pages 342–343. How is Joe Cepeda's way of working like Pam's way? **Reading/Writing Across Texts**

Poetry

Genre

Rhyming Poems have words with the same sound at the end of some lines.

Literary Elements

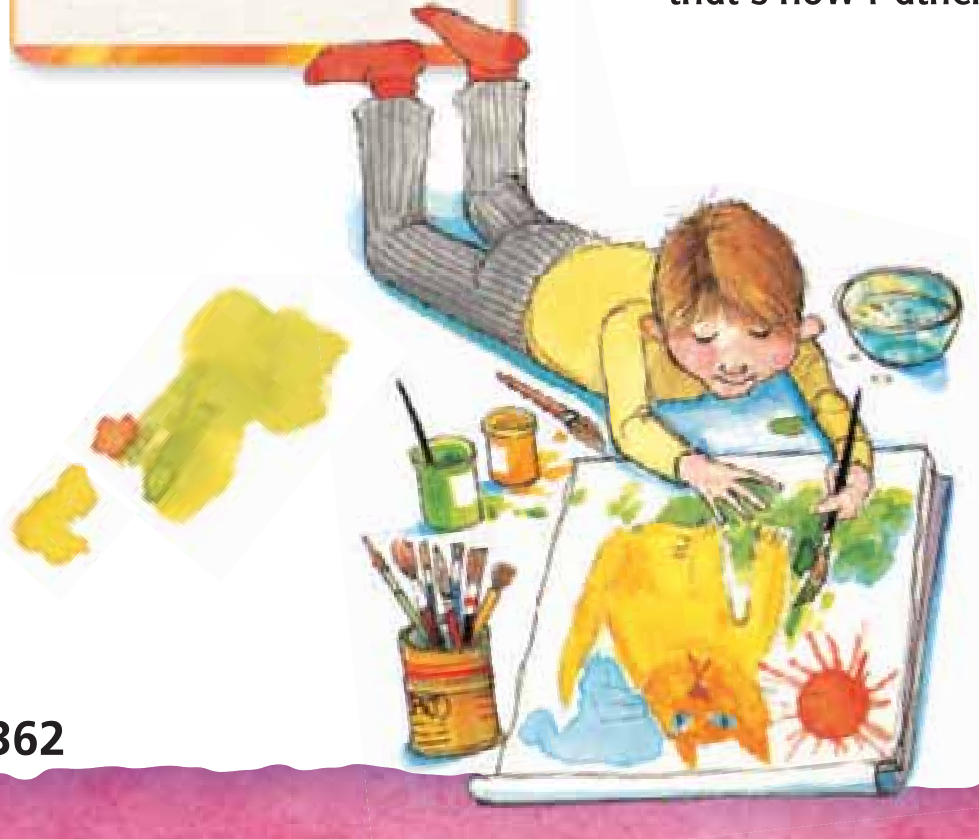
Onomatopoeia is the use of a word that sounds like the thing it refers to.

Word Play is when a writer uses words in a fun way, especially with meanings and sounds.

BRUSH DANCE

by Robin Bernard

A dot,
a blot,
a smidge,
a smear.
and just a little squiggle here...
A dab,
a dash,
a splish,
a splat.
that's how Patrick paints a cat!



CRAYONS

by Marchette Chute

I've colored a picture with crayons.
I'm not very pleased with the sun.
I'd like it much stronger and brighter.
And more like the actual one.
I've tried with a crayon that's yellow.
I've tried with a crayon that's red.
But none of it looks like the sunlight
I carry around in my head.

Connect and Compare

1. Which words from the poem "Brush Dance" use onomatopoeia? **Onomatopoeia**
2. Think about the speaker from the poem "Crayons" and Pam Muñoz Ryan from *Stirring Up Memories*. How are they alike? **Reading/Writing Across Texts**

Find out more about poetry at
www.macmillanmh.com

Write a Poem

Writer's Craft

Precise Words

Good writers use **precise words** to show their emotions about a topic.

The poem I wrote is about having a tea party with my mom.

Tea Party

by Brittany H.

A rainy Sunday, what should we do?
Mom said, "I've got an idea for you.
We'll make fancy snacks and iced tea.
I'll serve you, and you serve me!"
It was a terrific thing to do!
A gloomy day can be a fun day too.

I used lively and precise words to show emotion in my poem.

Your Turn

Write a poem about doing something with a family member. It does not have to rhyme. Use lively and precise words to show enthusiasm in the poem. Then use the Writer's Checklist to check your writing.

Writer's Checklist

☐ **Voice:** Does my poem have lively and **precise words** to show my feelings about the topic?

☑ **Word Choice:** Did I use words that paint a word picture? Are my words interesting?

☑ **Conventions:** Did I use the articles *a* and *an* correctly?

☑ **Sentence Fluency:** Does my poem sound interesting when I read it aloud? Does it have rhythm?

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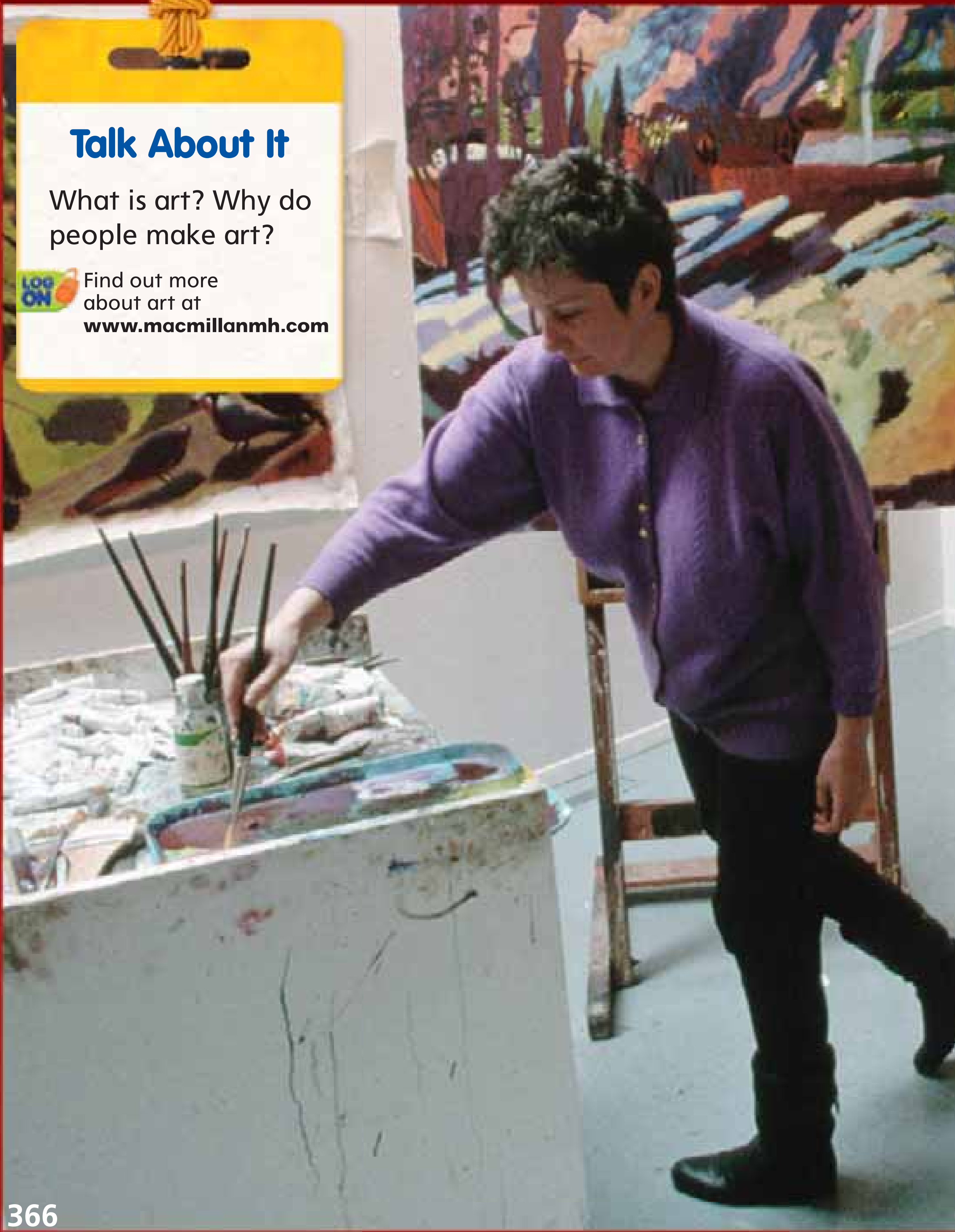
- ☑ **Sentence Fluency:** Does my poem sound interesting when I read it aloud? Does it have rhythm?

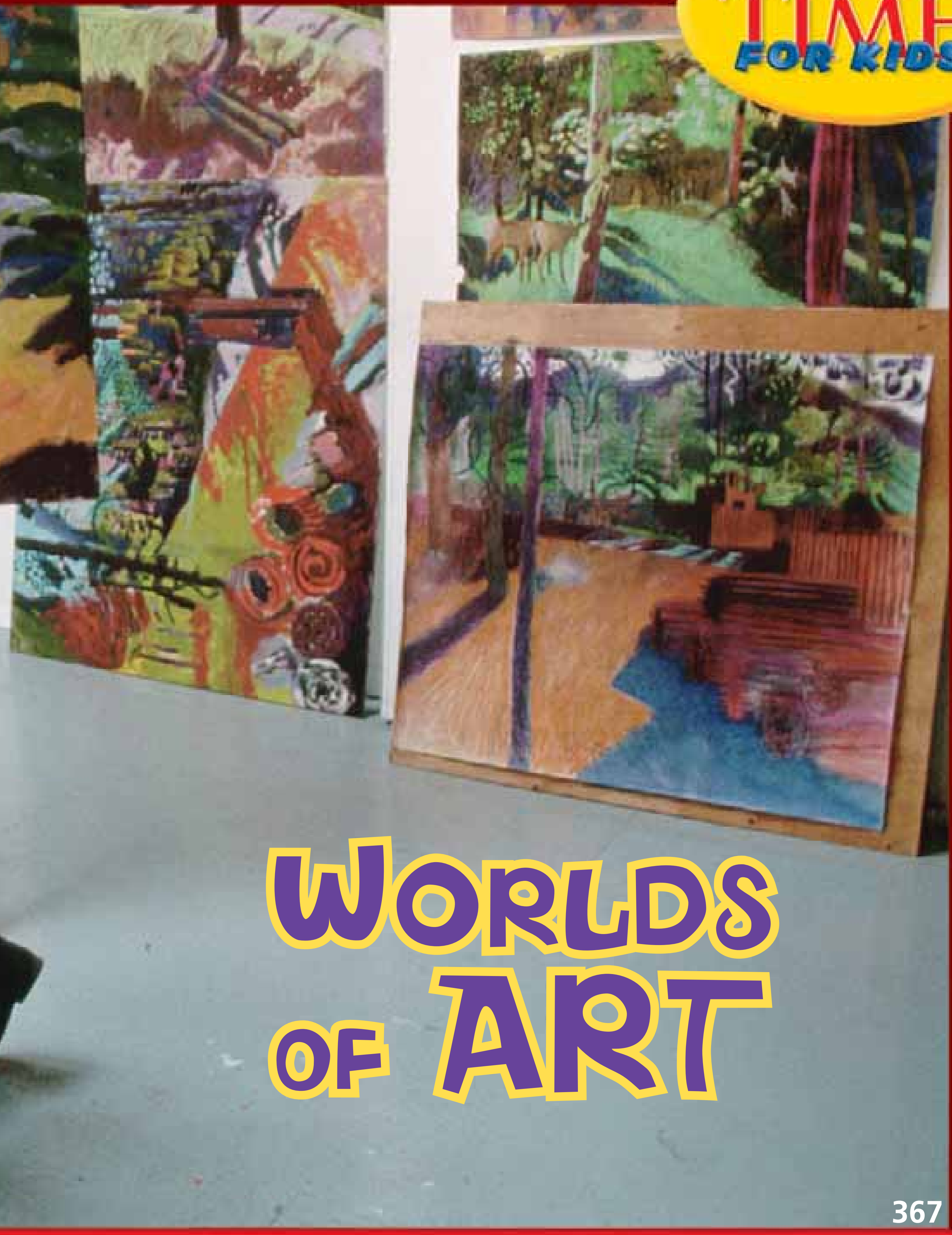
Talk About It

What is art? Why do people make art?

Find out more about art at **www.macmillanmh.com**



TIME FOR KIDS



WORLDS OF ART

Real World Reading

Vocabulary

impossible
treasures
watch
talent
pleasant

Snow sculptures in Canada

Frozen Art

Does it seem **impossible** for a block of ice to become a work of art? Some artists make it happen. Using special tools, the sculptors make interesting figures and shapes out of ice.

Ice art is popular in many places around the world. In Harbin, China, nearly a million people attend the Ice Lantern Festival to see the ice sculptures. In Canada, people go to the Winter Carnival in Quebec. Here they can stay at a hotel made entirely of ice!

So the next time it snows, imagine what beautiful artistic **treasures** you could create. Practice hard and **watch** your sculpture come to life. You'll see a wonderful, one-of-a kind piece of art!

A Chinese artist creates a bear out of ice.

People enjoy the ice slide at the Winter Carnival in Quebec, Canada.

LOG ON Find out more about ice art at **www.macmillanmh.com**

TIME FOR KIDS

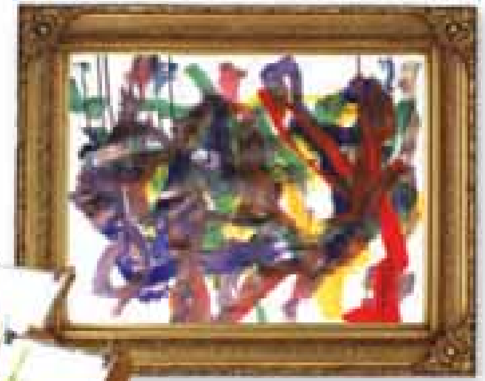
Elephant Artists

Think only people can paint pictures? Think again!

In Thailand, two elephants named Boon Yang and Bird are artists. With paintbrushes clutched in their trunks, they create works of art. You might not think elephants have much **talent**, but these two are very capable artists. Their paintings sell for more than a thousand dollars each!

Boon Yang and Bird used to work with people clearing trees in forests. But the time came when their help was no longer needed. Two human artists wanted to find a **pleasant** way to keep the elephants busy. Now Boon Yang and Bird spend their time painting, which they seem to enjoy. Some of their paintings even hang in museums!

◀ **Trainers encourage elephant artists Boon Yang and Bird to paint.**



▲ **This is one of the elephants' paintings.**

Real World Reading

Comprehension

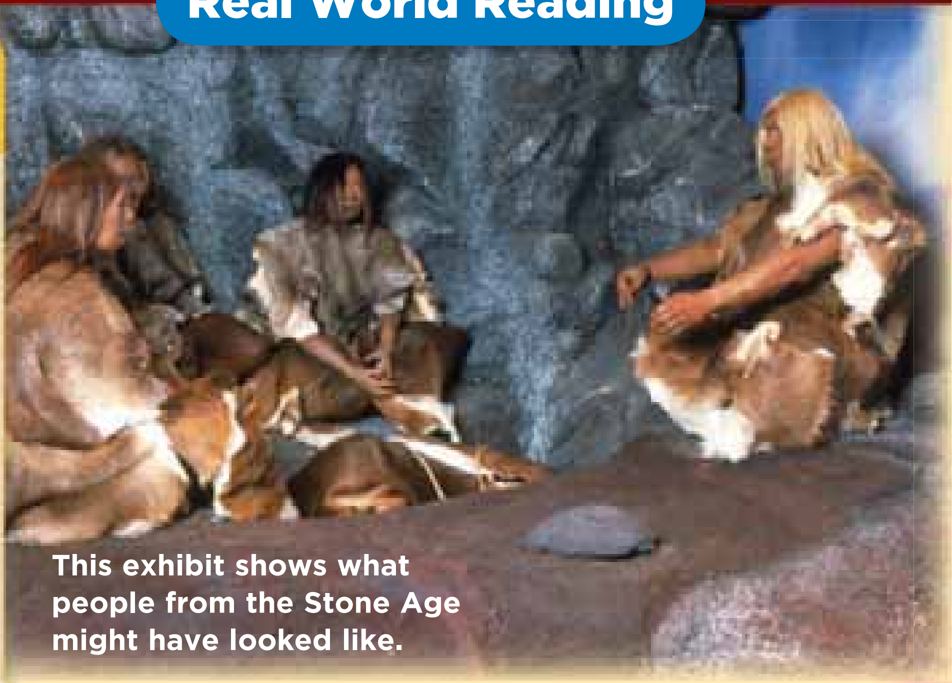
Genre

A **Nonfiction Article** gives information about real people, places, and events.

Text Structure

Make Judgments

When you make judgments, you decide what you think or how you feel about something.



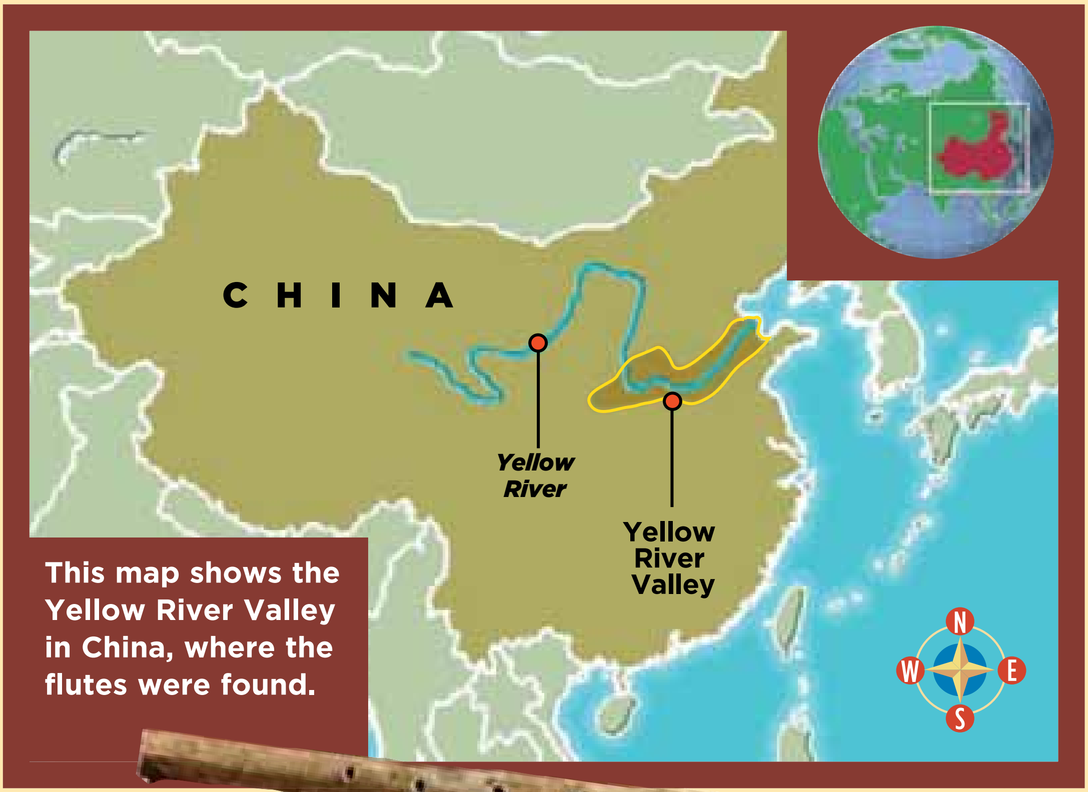
This exhibit shows what people from the Stone Age might have looked like.

Music of the Stone Age

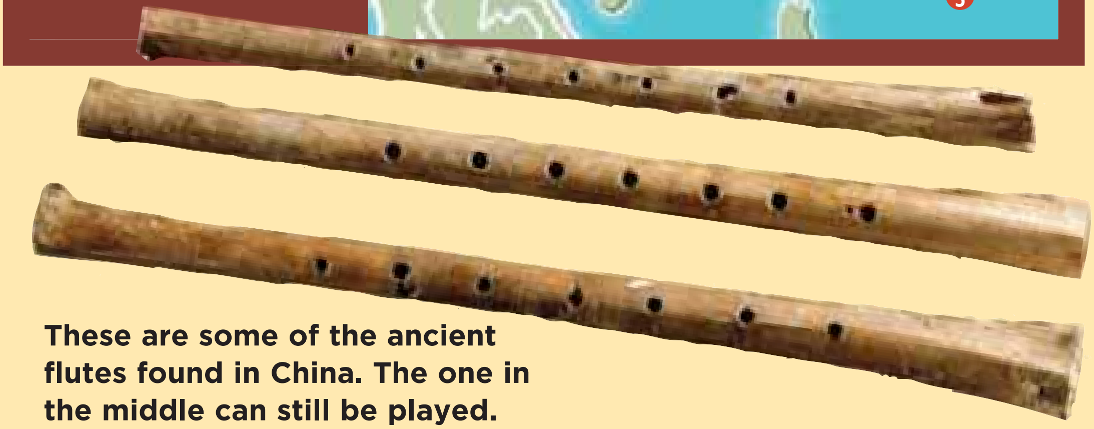
How do we know that people made music thousands of years ago?

Today, recorded music surrounds us. You can buy CDs of your favorite music. You can hear singers on the radio. You can even watch them on TV. Thousands of years from now, people will know about our music because we have made recordings of it.

Thousands of years ago, recording music was **impossible**. So how do we know that people long ago played music? Because scientists have found flutes that are 9,000 years old! The flutes were found in China, in the Yellow River Valley. Here, scientists unearthed all sorts of **treasures**, including 36 flutes.



This map shows the Yellow River Valley in China, where the flutes were found.



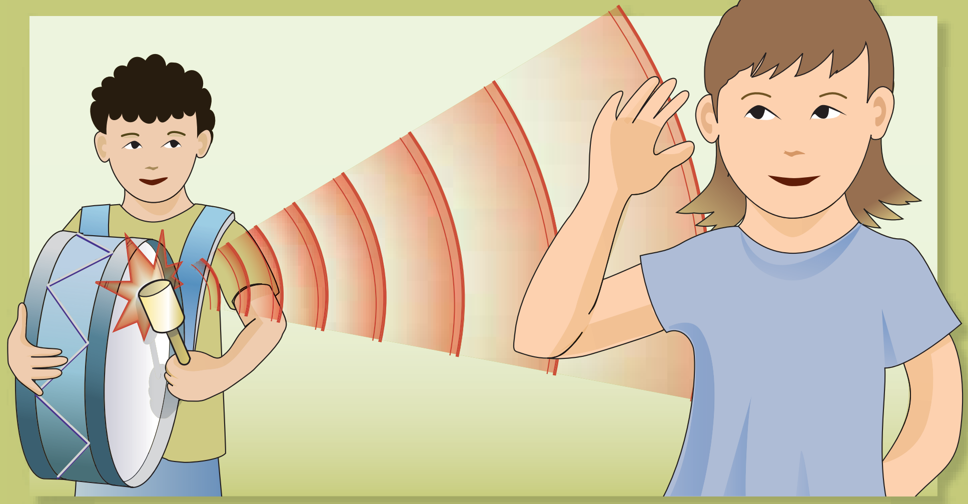
These are some of the ancient flutes found in China. The one in the middle can still be played.

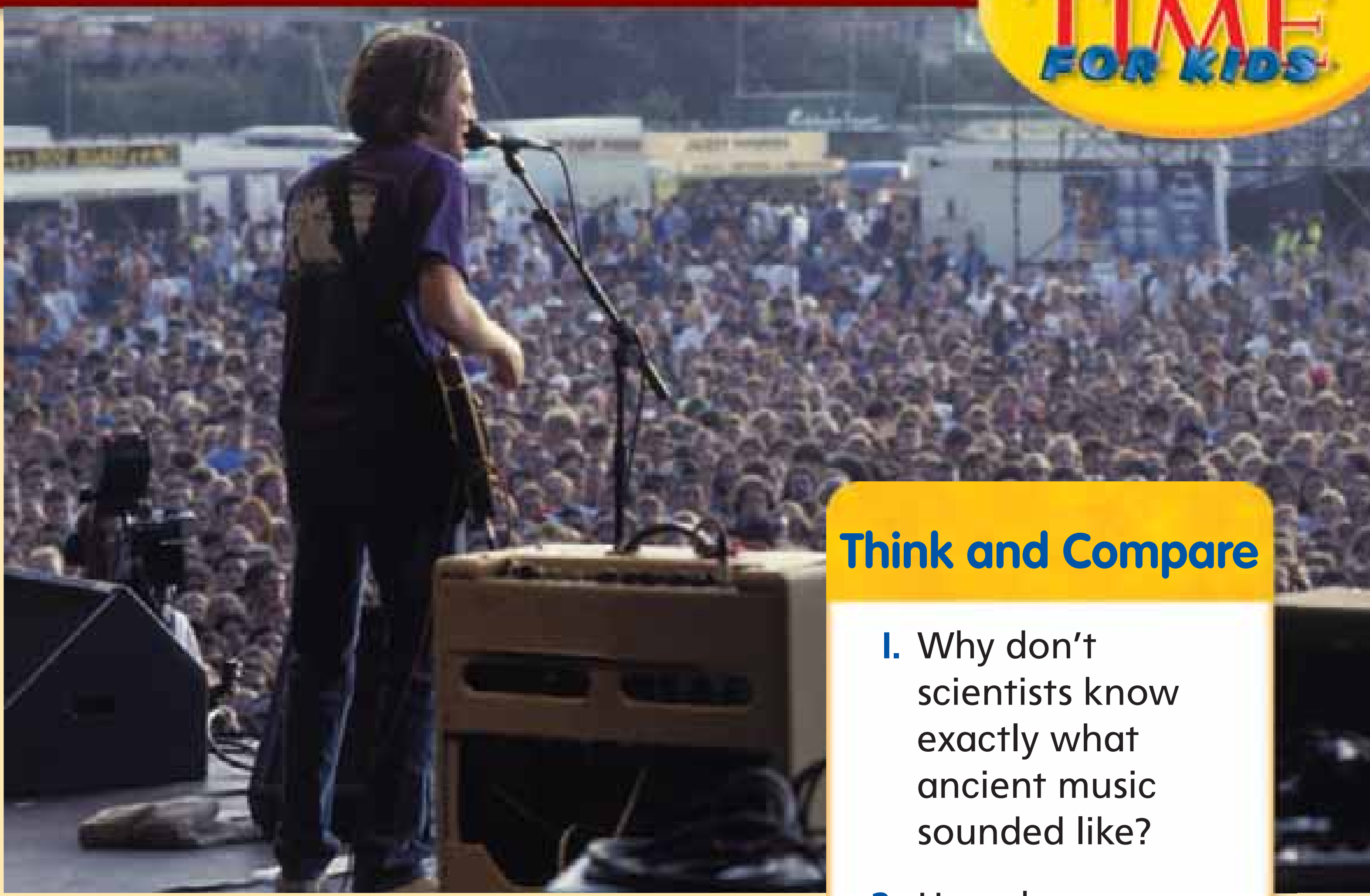
The flutes were made from the wing bones of a crane—a long-necked wading bird. People long ago carved and shaped the bones and put holes in them. Even more surprising was that one flute could still be played. "It [makes] a reedy, **pleasant** sound, a little thin, like a recorder," one scientist described.

The ancient flutes made a sound like a modern recorder.

What Is Sound?

Sound is a kind of energy that you can hear. Sound is made when something vibrates, or moves quickly back and forth. When something vibrates, it makes the air vibrate, too. Vibrating air carries the sound you hear.





Today, people can enjoy recorded music as well as live music at concerts like this one.

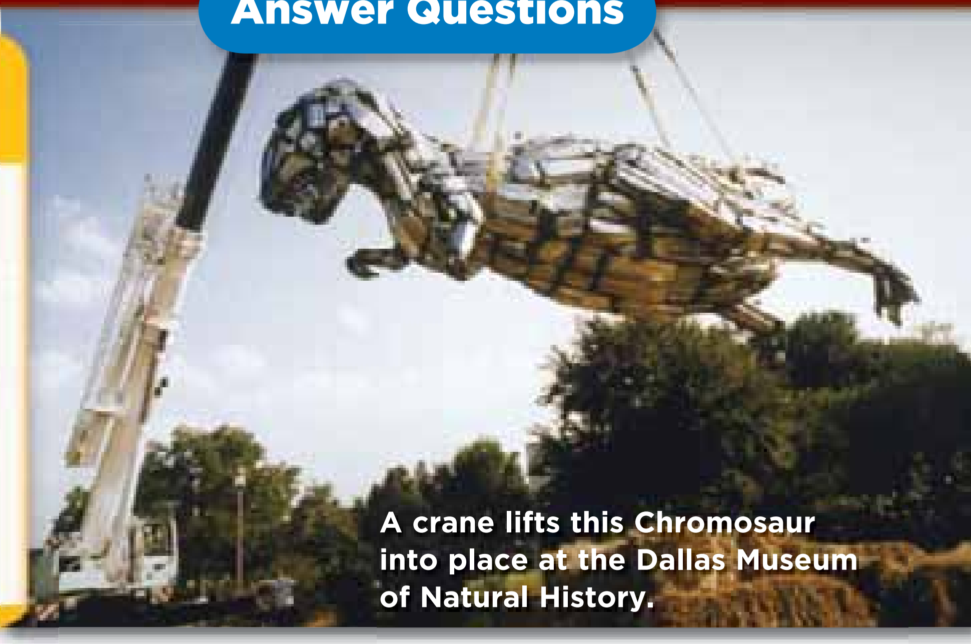
No one knows for sure what type of music the people from the Stone Age played. Did it sound like the music of today? Did people have musical **talent** and perform concerts? Did people sing along? We can only wonder what their music might have sounded like!

Think and Compare

1. Why don't scientists know exactly what ancient music sounded like?
2. How do you think music from the Stone Age was different from today's music?
3. What instruments are used to make your favorite kind of music?
4. In your judgment, what types of artists have the most talent? Why?

Test Strategy

On My Own
The answer is not in the selection. Form an opinion about what you read.


A crane lifts this Chromosaur into place at the Dallas Museum of Natural History.

The Art of Recycling

An artist in Mexico makes tiny furniture from bottle caps. Another artist in Liberia cuts up old flip-flop sandals to create a toy helicopter. For hundreds of years, people around the world have made artwork and toys from trash. They still do. In some places, trash may be the only material that artists and toymakers can afford.

This toy helicopter is made from old flip-flop sandals.

Artists in the United States recycle, too. John Kearney is a 74-year-old grandfather from Chicago, Illinois. He is also an artist who thinks junk is great for making art. He once made three giant dinosaur sculptures out of chrome car bumpers. He called them Chromosaurs. One of them was 18 feet tall!

Recycling can be a lot more than just tossing trash into a bin. A work of art can be beautiful whether it's made with paint, clay, or even recycled trash.

Go On ▶

TIME FOR KIDS

Directions: Answer the questions.

1. **What is the main idea of this story?**

   A There are many artists in Mexico.
   B Art is always made from trash.
   C Artists can use trash to make art and toys.
   D Car bumpers make good toys.

2. **What do the Chromosaurs and the helicopter have in common?**

   A They are made from car parts.
   B They are made from thrown-away materials.
   C They are tiny copies of big things.
   D They are children's toys.

3. **How did Chromosaurs get their name?**

   A from the scientist who found them
   B from their big teeth
   C because they are made of chrome
   D because it sounded good

4. **How does John Kearney recycle?**

5. **Why do you think artists try to find new ways to create art?**

Tip
Form an opinion.

STOP

Write to a Prompt

You read an article about a parrot at the zoo. The article said the parrot was an artist. Write a story about what happened next. Be sure your story has a beginning, a middle, and an ending.

I wrote the events in the order they happened.

The Painting Parrot

Grandpa and I went to the zoo to see a parrot that was supposed to be able to paint. I watched the bird smear green globs of paint on some paper. "Anybody could do that," I said to Grandpa. "Let's go see the gorillas."

Suddenly the parrot started painting really fast. It squawked, and I thought it sounded like "Look!" So I looked. The parrot had the paper in its beak. On it was a picture of a green gorilla. I guess that parrot can paint! And it can talk, too!

Your Writing Prompt

One day you were playing in the park when you found a stone flute. It looked very, very old. You picked it up. Just for fun, you tried to play it. You were very surprised by what happened next. Write a short story telling what happened.

Writer's Checklist

- ☑ Ask yourself, who will read my story?
- ☑ Plan your writing before beginning.
- ☑ Use details to support your story.
- ☑ Use your best spelling, grammar, and punctuation.

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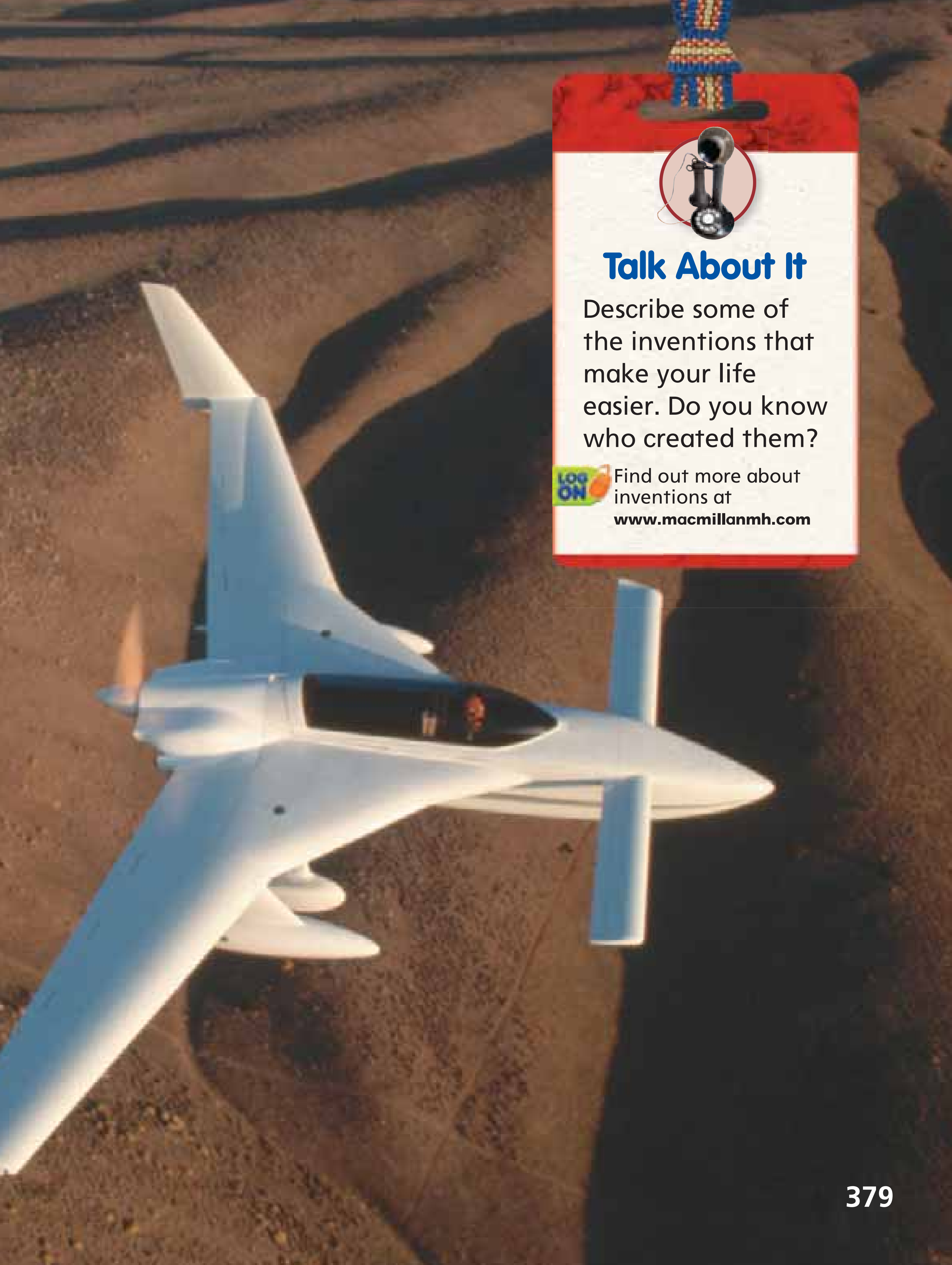
INVENTIONS THEN AND NOW



Talk About It

Describe some of the inventions that make your life easier. Do you know who created them?

Find out more about inventions at **www.macmillanmh.com**

Vocabulary

allowed
powerful
invented
instrument
products
design

Word Parts

Suffixes are word parts that can be added to the end of a word to change its meaning.

power + *ful* = *powerful*

Powerful means "full of power."

Kid Inventors Then and Now

by Kali Capria

Chester Greenwood was a fifteen-year-old who lived in the 1800s. Chester's parents **allowed** him to play outside. They let him go out even in the wintertime. Chester lived in Maine, where the winters are cold. There is lots of snow and **powerful**, strong winds. Chester would get very cold, but he wouldn't wear a hat.

Chester decided to create something to solve his problem. He **invented** a way to keep his ears warm. He used an **instrument**, or tool, to bend wire into loops.

Greenwood's Ear Protectors
Worn by Millions
25c
"Blizzard Proof"

This is an ad for Chester Greenwood's earmuffs.

His grandmother then sewed fur onto them. Chester had created the first pair of earmuffs!

More than 100 years later, cold, snowy weather also gave ten-year-old K-K Gregory an idea. Snow kept getting up her coat sleeves. She looked in many stores to find an item to solve her problem. She couldn't find any good **products**. So K-K made a **design** for a new kind of glove. She drew and described something she called *wristies*. Wristies are long gloves without fingers. They were a big hit with people living in cold places all over the world!

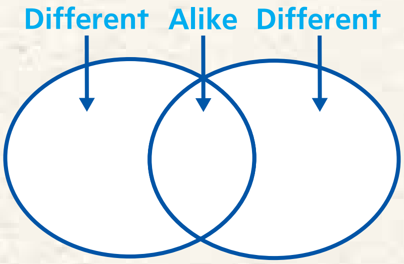
K-K Gregory tries out her invention.

Reread for Comprehension

Reread

Compare and Contrast

Rereading can help you compare and contrast information in an article. To compare means to tell how things are alike. To contrast means to tell how they are different. Reread the selection and use the chart to compare and contrast these inventors.



Comprehension

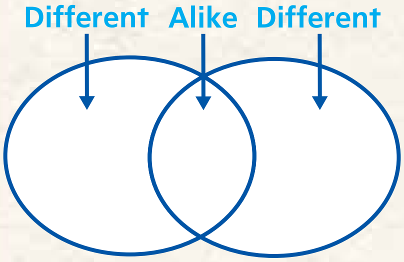
Genre

A **Biography** is the story of a person's life written by another person.

Reread

Compare and Contrast

As you read, use the Compare and Contrast Chart.


Different
Alike
Different

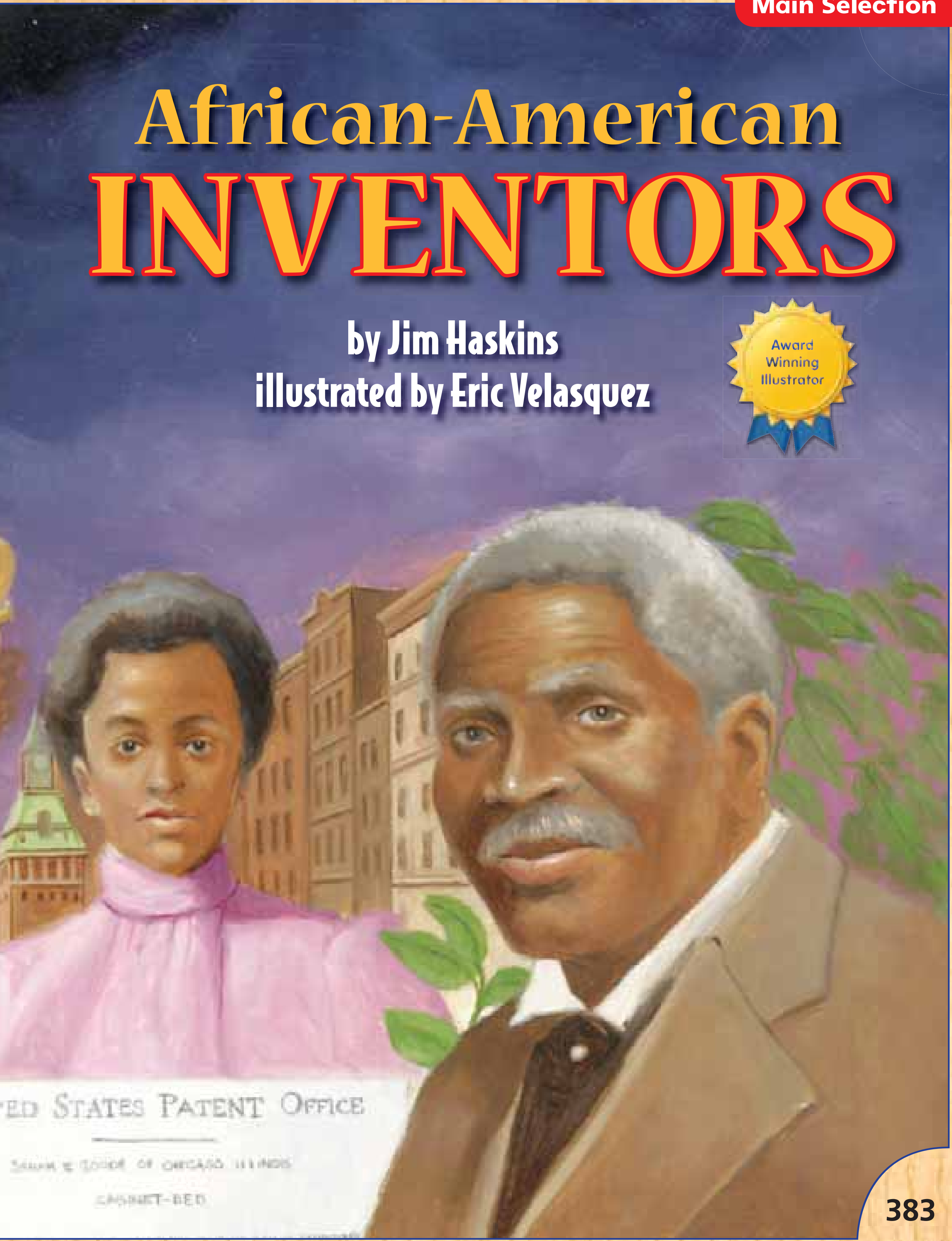
Read to Find Out

How are these inventors alike? How are they different?

African-American INVENTORS

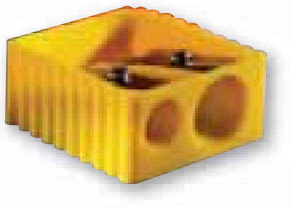
by Jim Haskins
illustrated by Eric Velasquez

Award Winning Illustrator


ED STATES PATENT OFFICE
SARAH E. GOODE OF CHICAGO ILLINOIS
CABINET-BED

Introduction

Inventors create new things. Their inventions solve problems or make life better in some way. Throughout our history, African Americans have **invented** many important things.



◀ John Lee Love received a patent for a pencil sharpener in 1887.

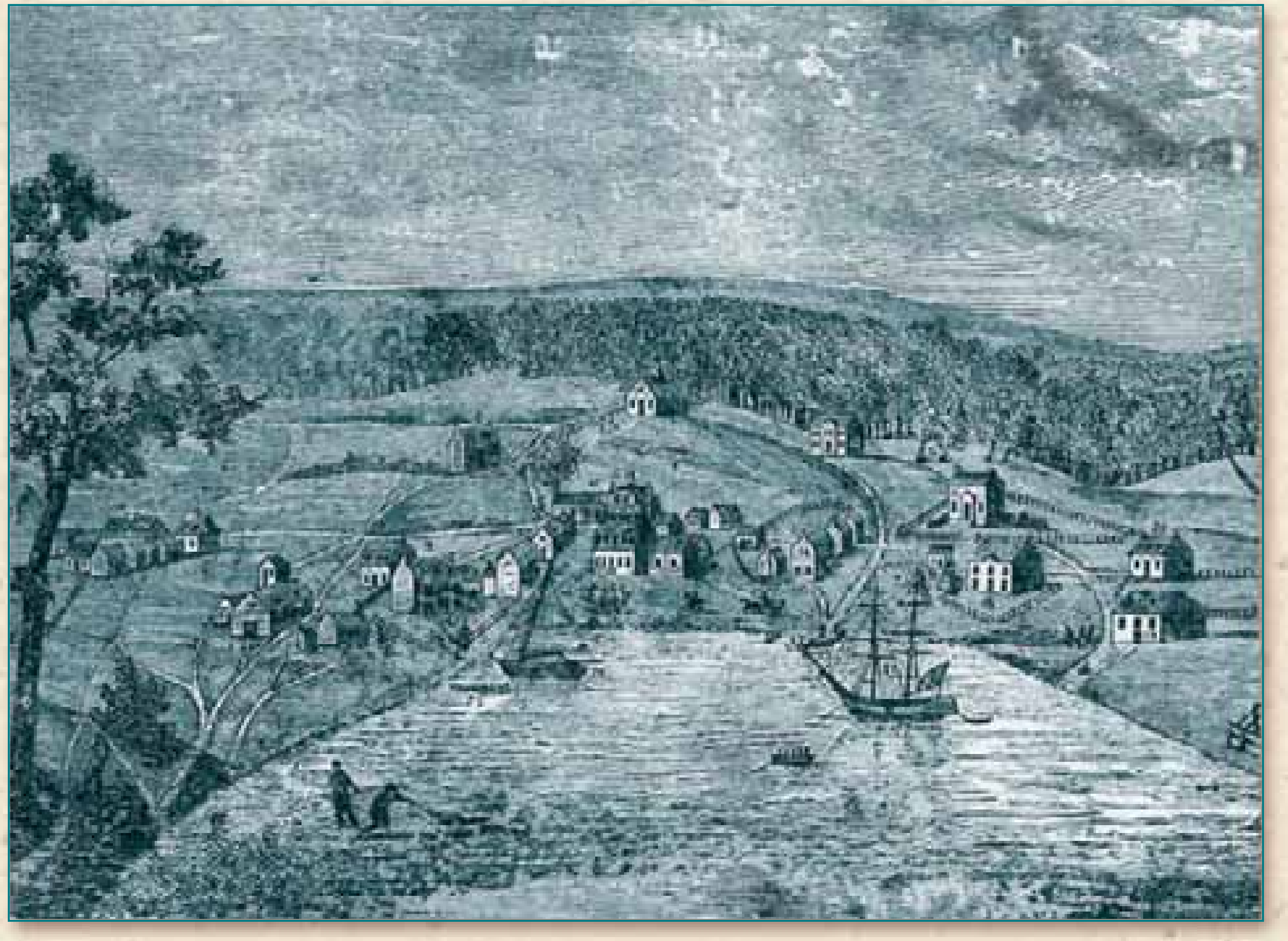
Garrett Morgan received a patent for an early type of traffic signal on November 20, 1923. ▶

◀ John Purdy and James Sadgwar patented a folding chair in 1889.

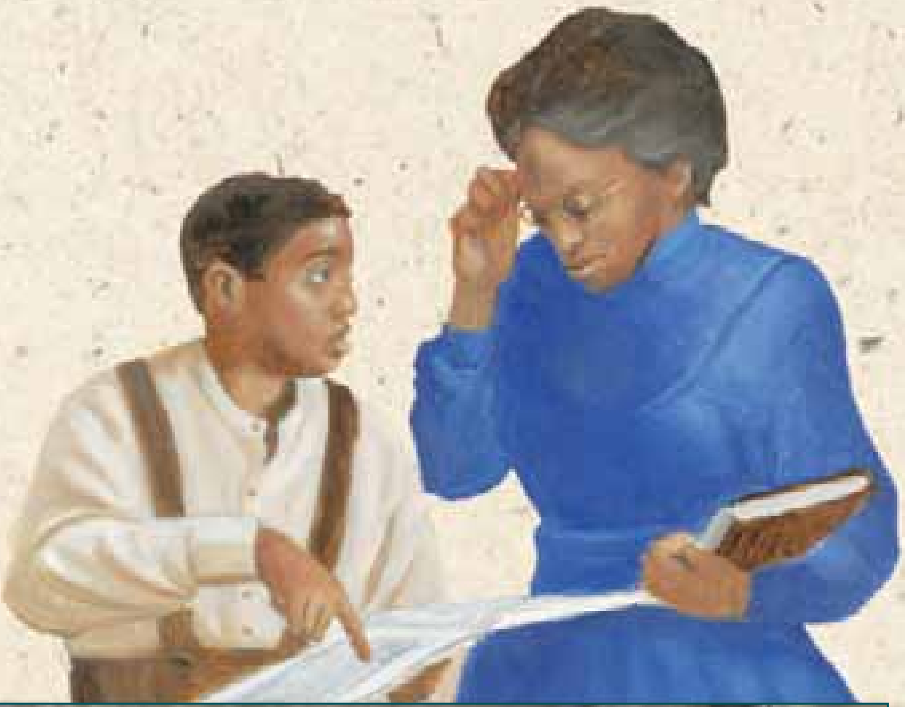
Benjamin Banneker

Benjamin Banneker was born on a farm in Maryland in 1731. At that time, Maryland was one of thirteen British colonies in North America.

Most African-American people in the colonies were enslaved, but Benjamin's parents were free. Because Benjamin was born to a free family, he could go to school.



▲ Benjamin Banneker grew up near Baltimore, Maryland, in the mid-1700s.

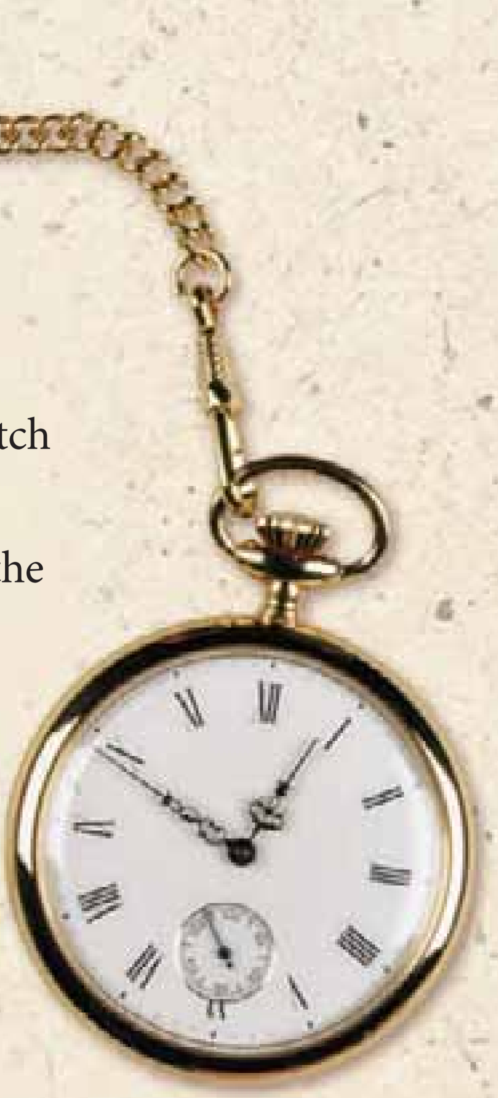


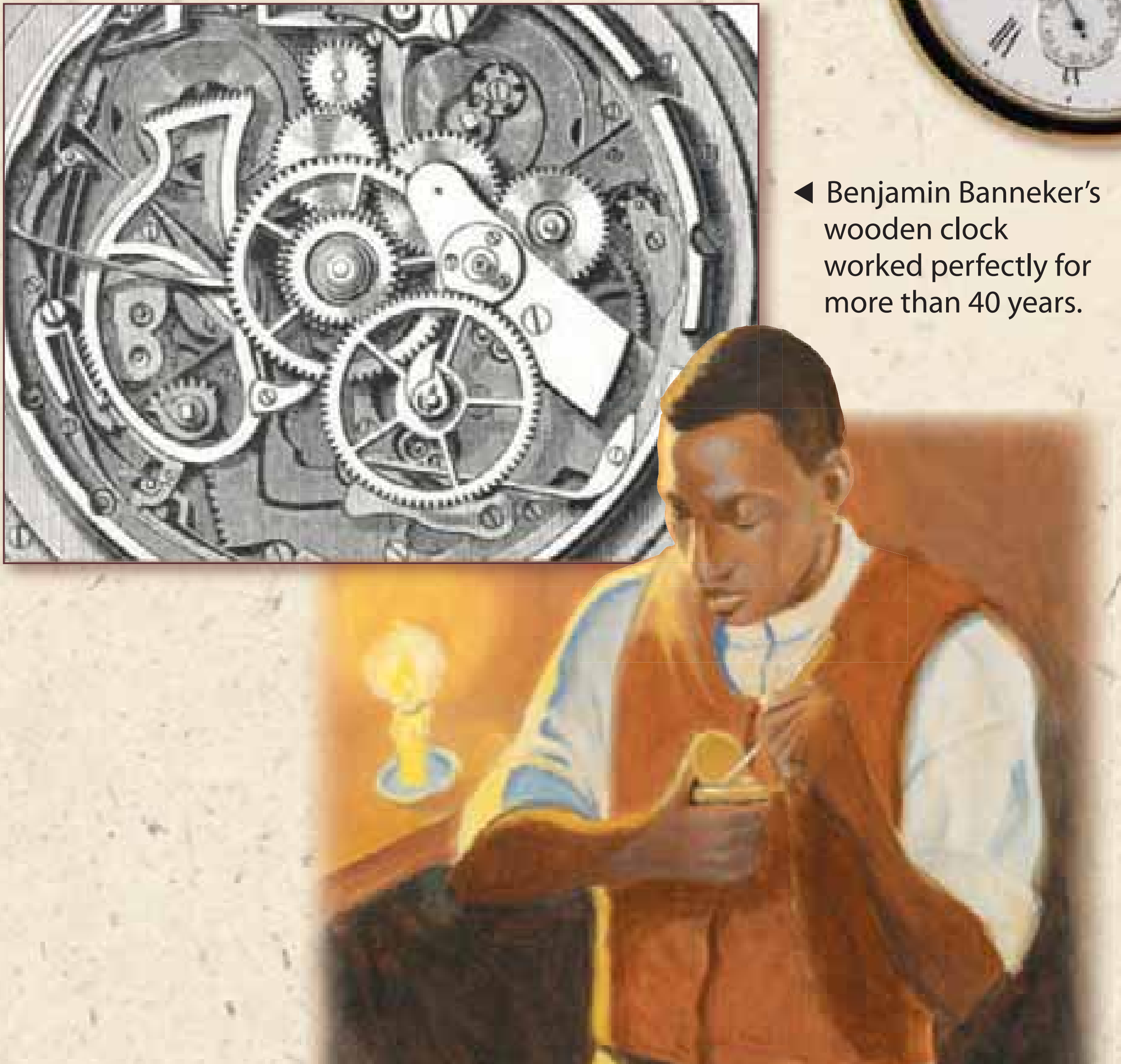
In the 1700s many schoolhouses were usually one room. ▼

Benjamin went to a local school for boys. He was so good at math that he soon knew more than his teacher. After he finished his education, Benjamin worked on the family farm.

Benjamin's life changed when he was twenty years old. He met a man who owned a pocket watch. The watch had been made in Europe. Benjamin was so interested in the watch that the man let him keep it.

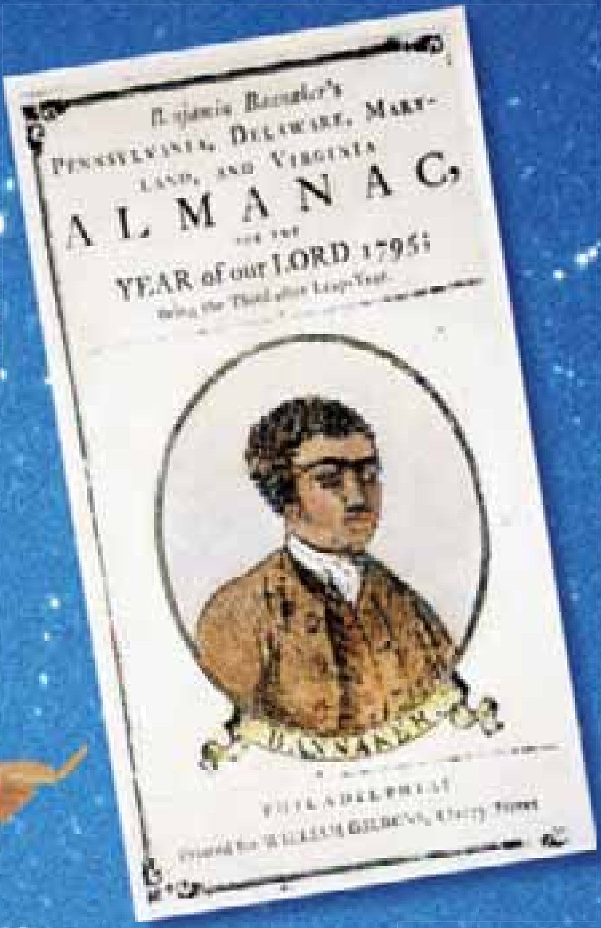
Benjamin studied the watch, its parts, and the way it was made. He decided to make his own clock out of wood. It was the first clock ever made in North America.





◄ Benjamin Banneker's wooden clock worked perfectly for more than 40 years.

Benjamin used his clock to measure the movements of the stars. He used math to figure out the position of the stars, sun, moon, and planets. Years later, he wrote an almanac. An almanac is a book that lists the positions of the sun, moon, and planets for every day of the year.

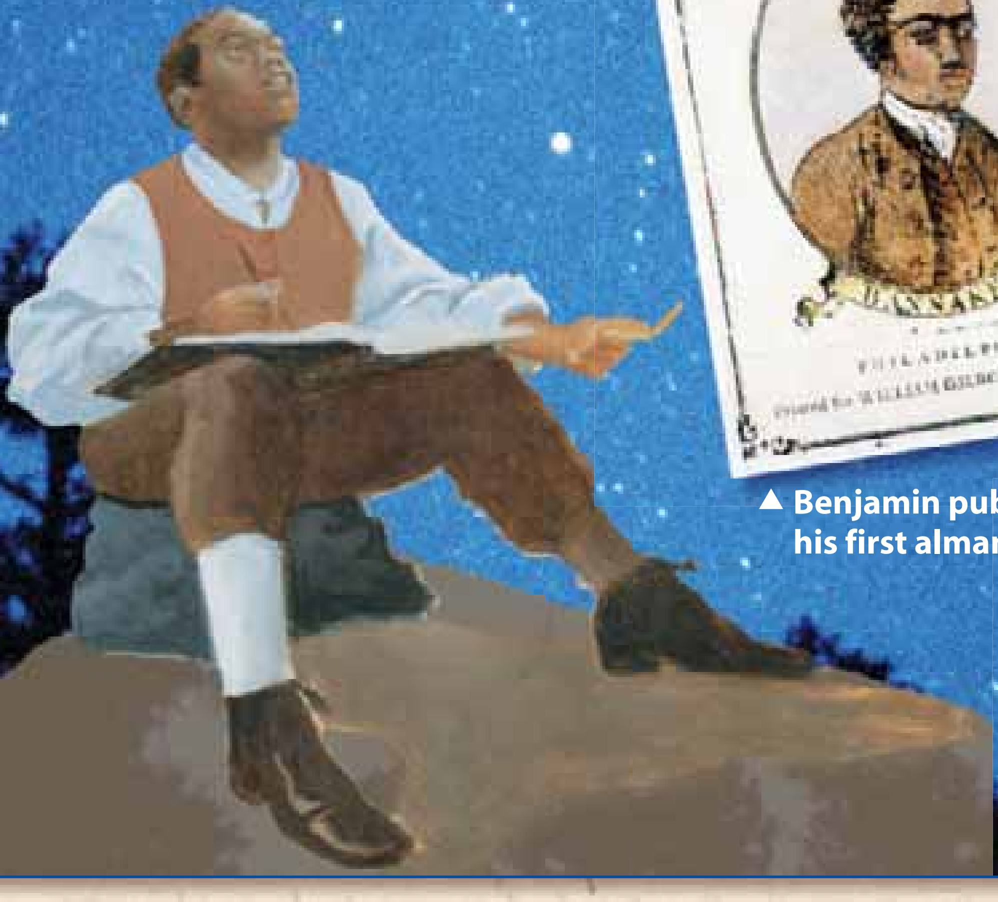


Benjamin Banneker's
PENNSYLVANIA, DELAWARE, MARY-
LAND, AND VIRGINIA
ALMANAC,
FOR THE
YEAR of our LORD 1795;
Being the Third after Leap-Year.

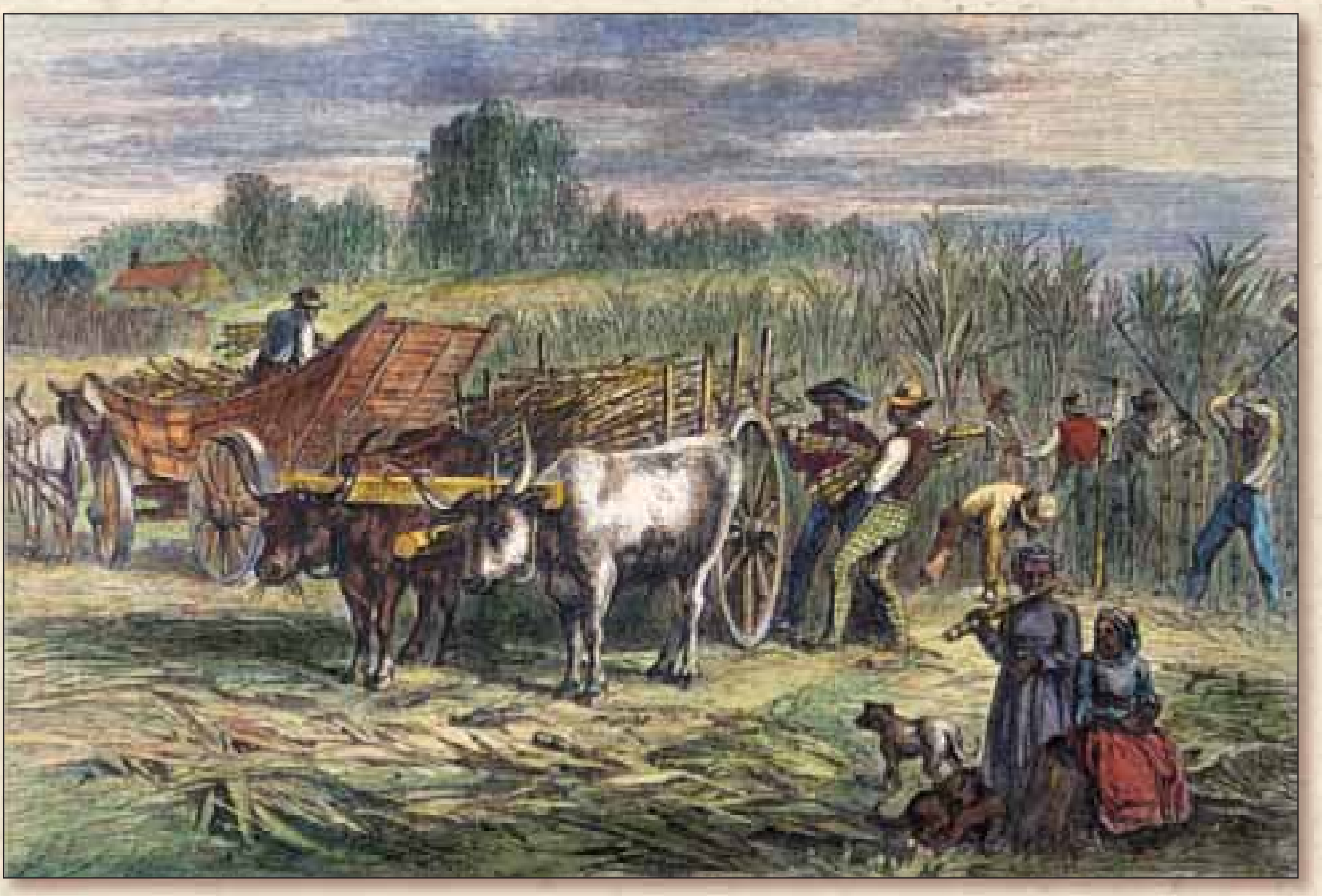
BANNEKER

PHILADELPHIA:
Printed for WILLIAM GIBBONS, Cherry Street

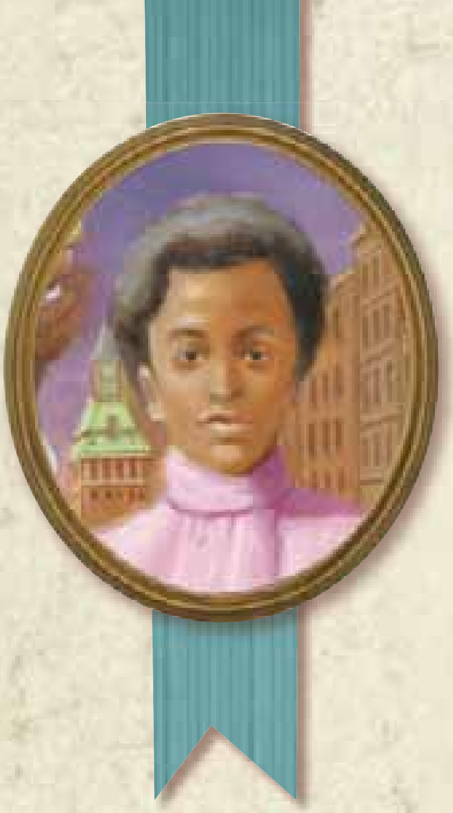
▲ **Benjamin published his first almanac in 1792.**



Benjamin wrote a new almanac every year for ten years. People read it to find out when the sun and moon would rise and set. They read it to find out how the weather would change each season. Many farmers used Benjamin's almanacs so they would know when to plant their crops. He was as famous for his almanacs as he was for his clock.



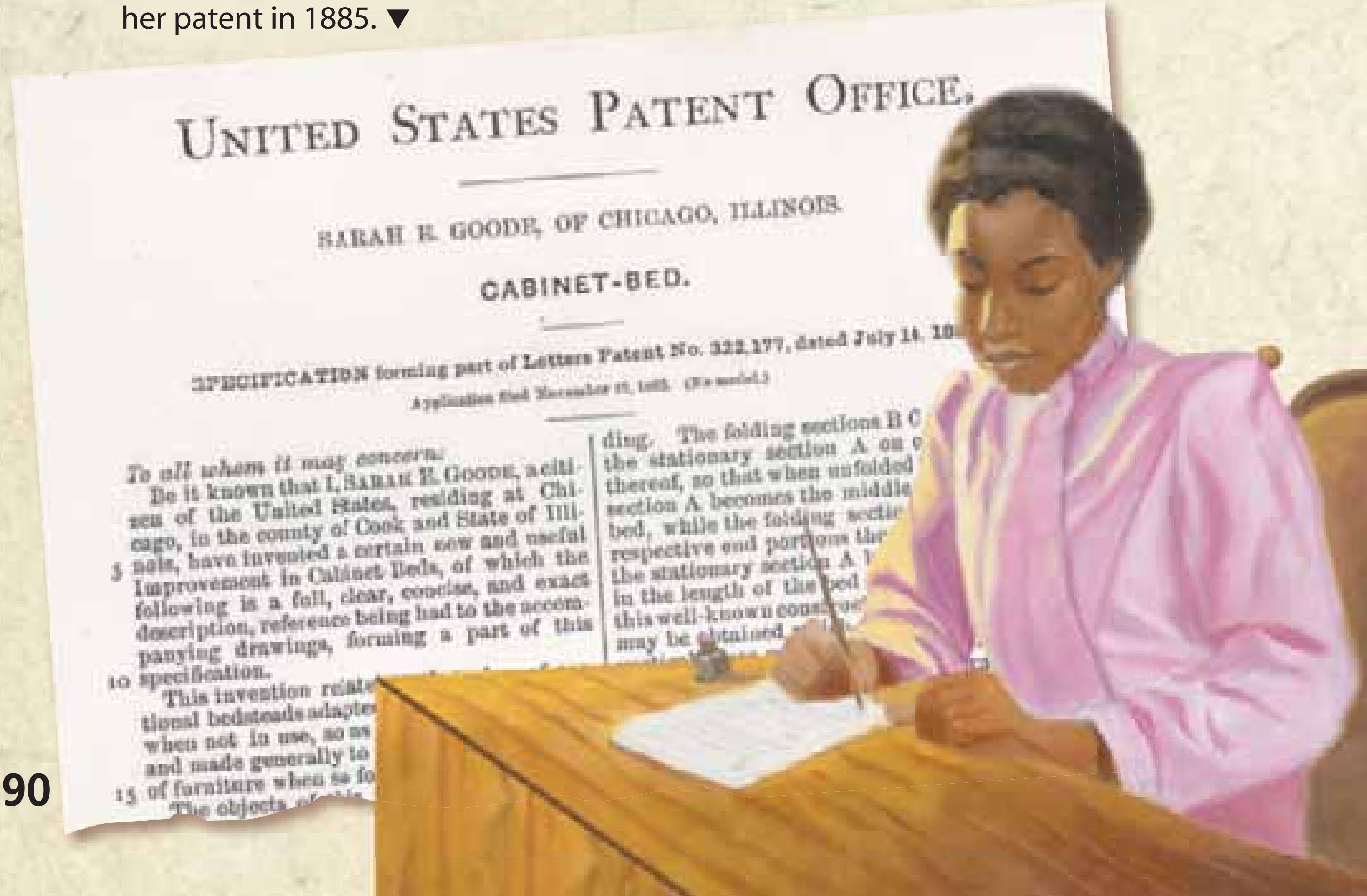
▲ Farming in the 1700s was done by hand. Tractors and other farm machines had not been invented yet.



Sarah E. Goode

We know quite a bit about Benjamin Banneker. We know very little about Sarah E. Goode. What we do know is that she was the first African-American woman to receive a patent for an invention.

A patent is a legal paper. It is given out by the United States government in Washington, D.C. A person who invents something can get a patent to prove that he or she was the first to have made it. No one else can say they invented that same thing.



Sarah Goode received her patent in 1885. ▼

UNITED STATES PATENT OFFICE.

SARAH E. GOODE, OF CHICAGO, ILLINOIS.

CABINET-BED.

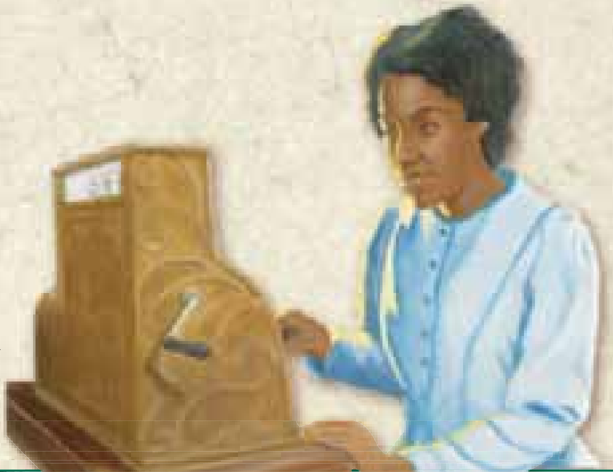
SPECIFICATION forming part of Letters Patent No. 322,177, dated July 14, 18

To all whom it may concern:

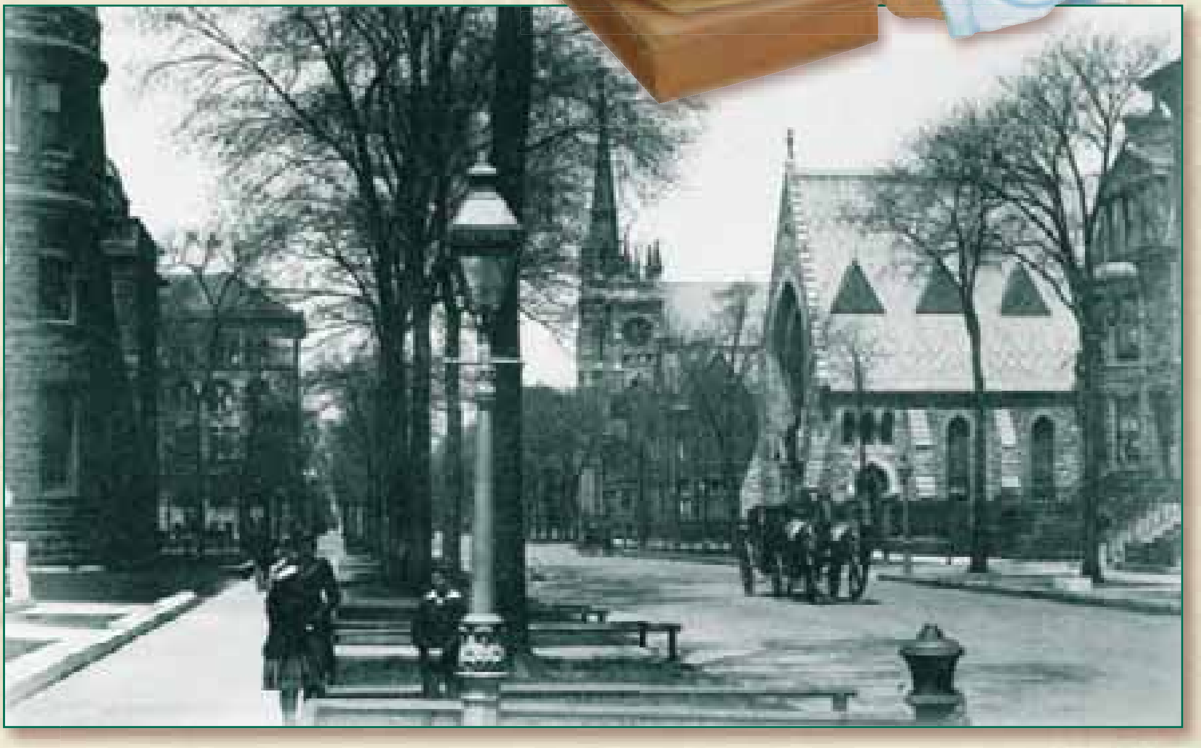
Be it known that I, SARAH E. GOODE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Cabinet-Beds, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relat
tional bedsteads adapte
when not in use, so as
and made generally to
of furniture when so fo
The objects of

ding. The folding sections B C
the stationary section A on e
thereof, so that when unfolded
section A becomes the middle
bed, while the folding secti
respective end portions the
the stationary section A
in the length of the bed
this well-known constr
may be obtained



Sarah Goode owned a furniture ▶
store in the 1880s.



▲In the 1880s and 1890s many people moved to Chicago to find jobs.

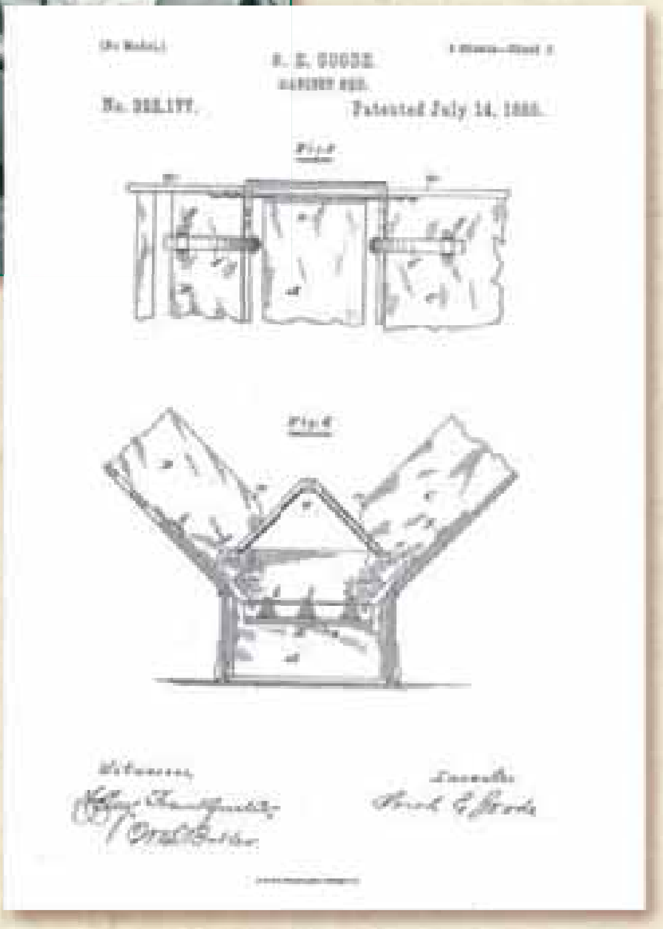
Sarah was born in a southern state in 1850. She was born into slavery. When slavery ended, Sarah was a teenager. She was able to go to school once she was free. After she received her education, Sarah moved to Chicago, Illinois.

Sarah must have been smart and hard working. By the time she was 35 years old, she owned her own business. Sarah Goode was the owner of a furniture store.

Many African-American people were moving from southern states to northern states in the 1870s and 1880s. They moved into apartment houses. Sometimes many people slept in one room. This was because many people did not have enough money to rent their own rooms.

Sarah had the idea of making a bed that could fit in a small space. It could fold up during the day and unfold at night. She worked out a **design**. Then she made a model.

▲ Some Chicago apartments in the 1800s looked like this.



Sarah's patent showed the cabinet bed design. Folded up it looked like a desk. It opened up into a bed. ▶

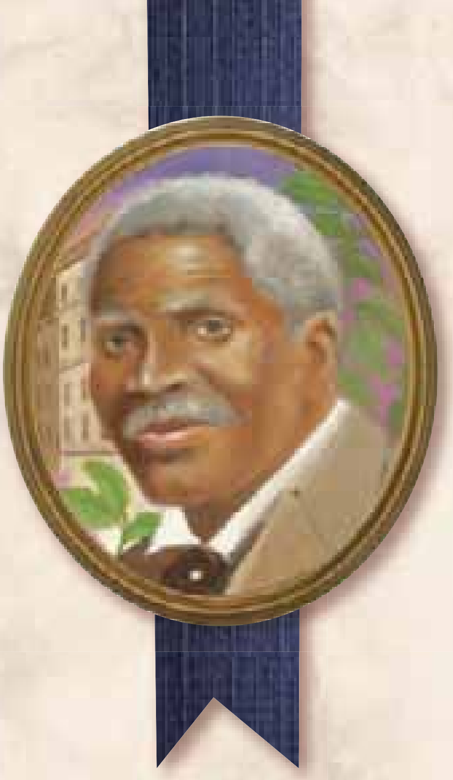
Different folding bed designs have been made over the years.

Sarah called her invention a "cabinet bed." When it was folded up, it could be used as a desk. There was even a place for keeping pens and paper.

Sarah did not want anyone else to copy her invention. She made sure of that by getting a patent.

We do not know how many cabinet beds Sarah made. We do know that her idea is still helpful for people. Folding beds are still in use today.

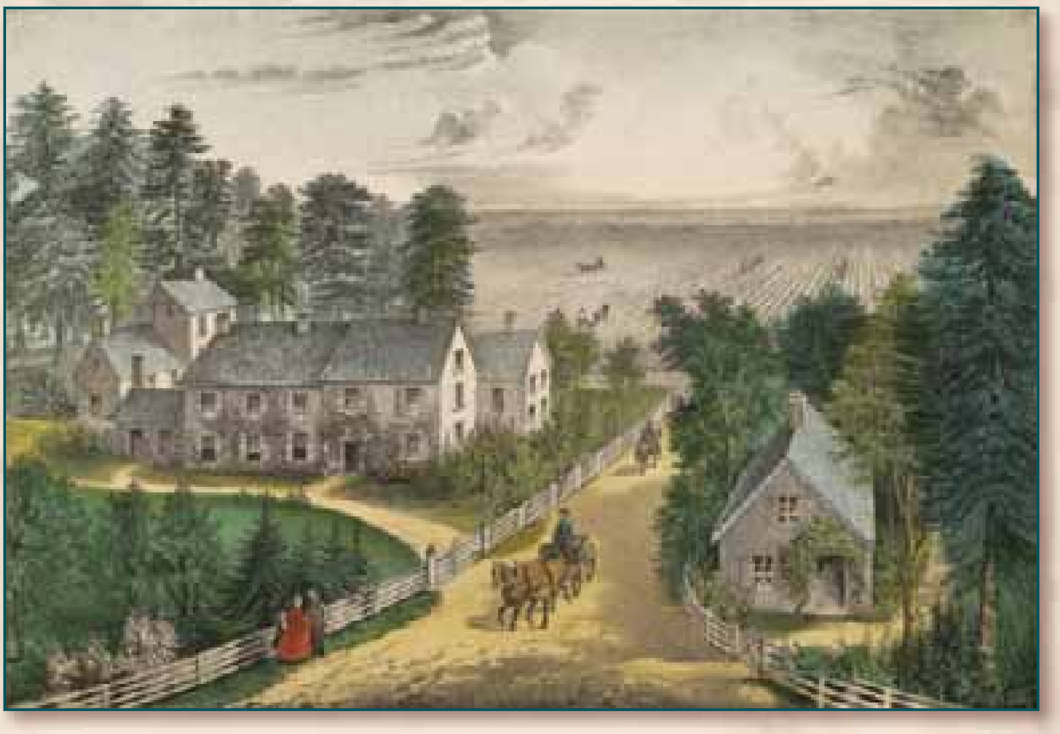
Compare and Contrast
In what ways did Benjamin Banneker's and Sarah Goode's inventions help people?



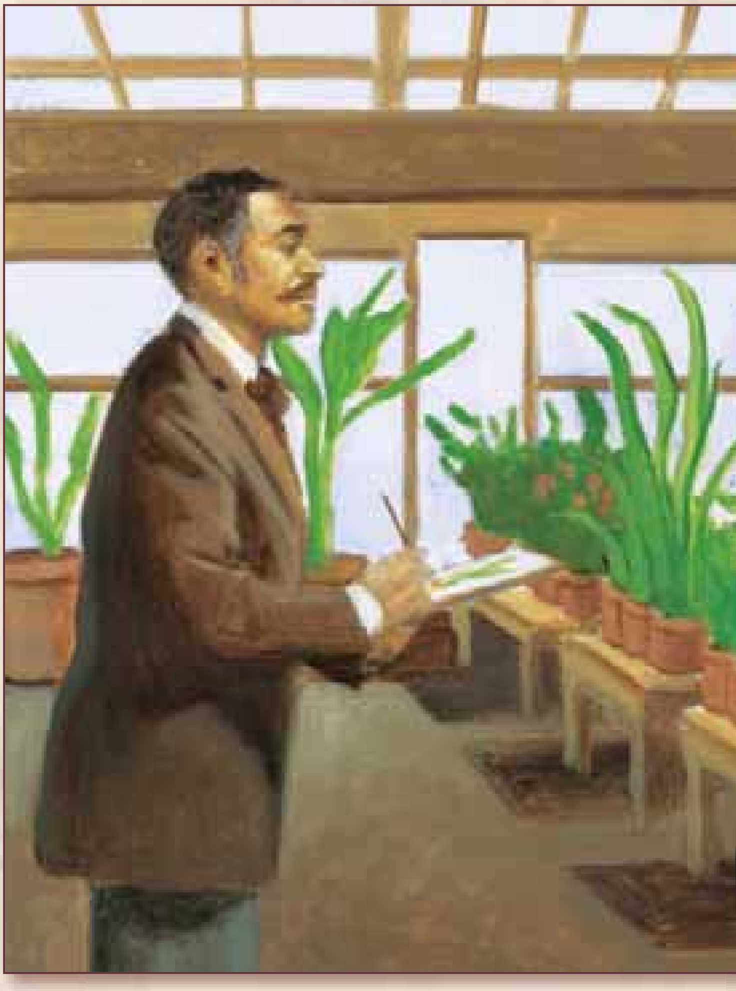
George Washington Carver

George Washington Carver was born in Missouri about 1861. Like Sarah E. Goode, he was born into slavery. His family was enslaved by a couple named Carver. George was raised by Mr. and Mrs. Carver.

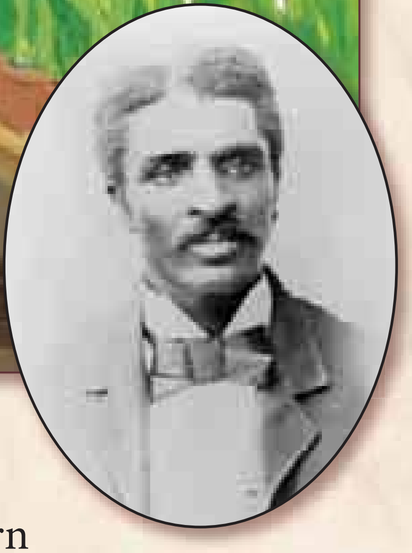
George loved the Carver farm, with all of its plants and animals. He planted his own garden. Soon, he knew so much about plants that people called him the Plant Doctor.



▲ This is a painting of a typical farm in the 1870s.



▲ George Washington Carver at school.



▲ George graduated from college in 1894.

George wanted to go to school to learn more about plants. Slavery was over, so he was free to leave the Carver farm. It took him twenty years to get enough education and save enough money to enter college.

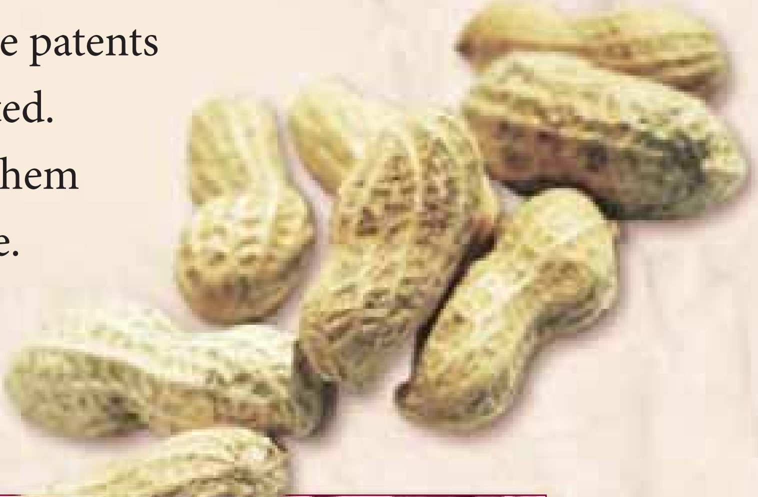
George went to college in Iowa. He was the first African-American student at the school. He studied farming and learned even more about plants. When he graduated, he became a teacher.

▲George taught at his college in Alabama.

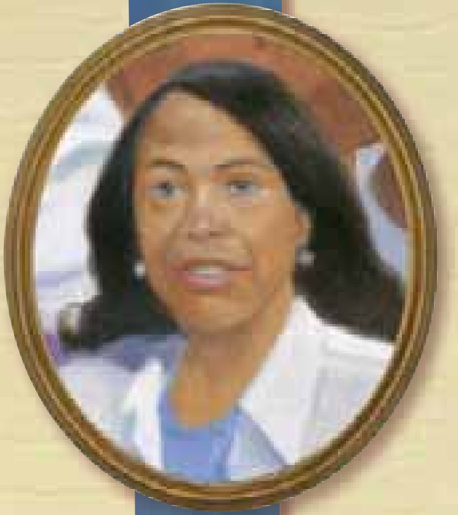
▲George told farmers which vegetables were useful crops to grow.

George taught at Tuskegee Institute in Alabama. It was a college for African-American people. He studied plants at the college. George told farmers that peanuts and sweet potatoes were good crops to grow. He found that he could make 118 different **products** from the sweet potato. These included soap, coffee, and glue.

George learned that he could do even more with peanuts. He made over 300 different products from peanuts. Some of these were peanut butter, ice cream, paper, ink, shaving cream, and shampoo. George only received three patents for the products he invented. He believed that most of them should belong to everyone.



▲ George spent many hours working in his laboratory.



Patricia Bath, M.D.

Patricia Bath was born more than 75 years after George Washington Carver. Patricia was born in a northern state. She grew up in the New York City neighborhood of Harlem.

Like George Washington Carver, she was still young when she began to study living things. Her special interest was human diseases. After high school, she got a job helping people who studied cancer.

▲ Patricia Bath grew up in Harlem, New York, in the 1940s.

In college, Patricia studied chemistry. Then she went to medical school. She decided to study eye diseases. She wanted to find out how to remove cataracts.

Cataracts are like clouds on the lens of the eye. They make everything look cloudy. Patricia designed an **instrument** for removing cataracts. It gives off a **powerful** beam of light that breaks up the cataract. Then it can be removed.

▲ Dr. Patricia Bath performing eye surgery.

In 1988 Patricia received a patent for the instrument she invented. She was the first African-American woman to get a patent for a medical invention. Since then she has invented other eye instruments. Her work has **allowed** many people to see again.

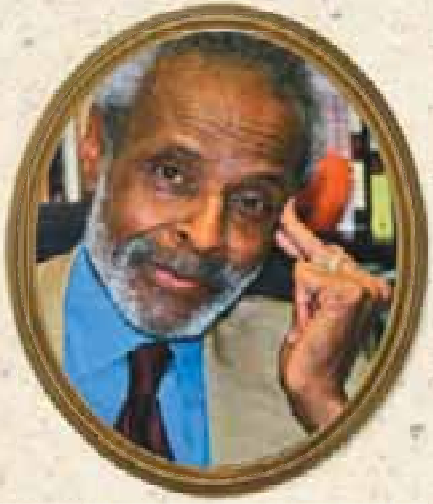
Compare and Contrast
What do Patricia Bath and George Washington Carver have in common? How are their lives different?

◀ Dr. Patricia Bath has invented many eye instruments.

Inventors Change the World

The stories of these four inventors show how African-American inventors have helped make life better for all Americans throughout history. Benjamin Banneker helped people keep time and know the positions of the stars and planets. Sarah Goode made furniture for people to use in small homes. George Washington Carver made hundreds of products from sweet potatoes and peanuts. Dr. Patricia Bath invented a cure for one kind of blindness. The world is better because of their work.

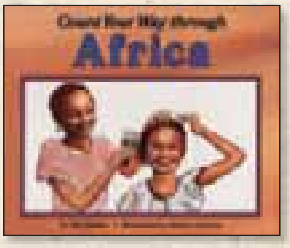
Meet the Author

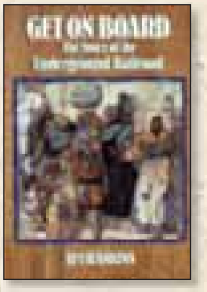


Jim Haskins has written more than 100 books. Many of his books are about African Americans and great things they have done. Some are about the history and culture of Africa.

Jim has always loved to read and learn about famous people. He says, "I did not have any favorite childhood authors, but mostly enjoyed reading the *Encyclopaedia Britannica* and *World Book*, Volumes A through Z."

Other books written by Jim Haskins





LOG ON Find out more about Jim Haskins at **www.macmillanmh.com**

Author's Purpose

Jim Haskins wanted to inform you about some African American inventors. Think about the four biographies. Write about the inventor you think is most interesting. Include reasons for your choice.

Comprehension Check

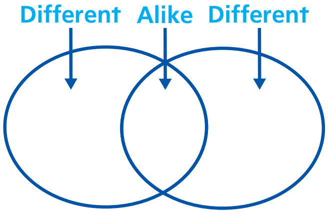
Retell the Story

Use the Retelling Cards to retell the selection.

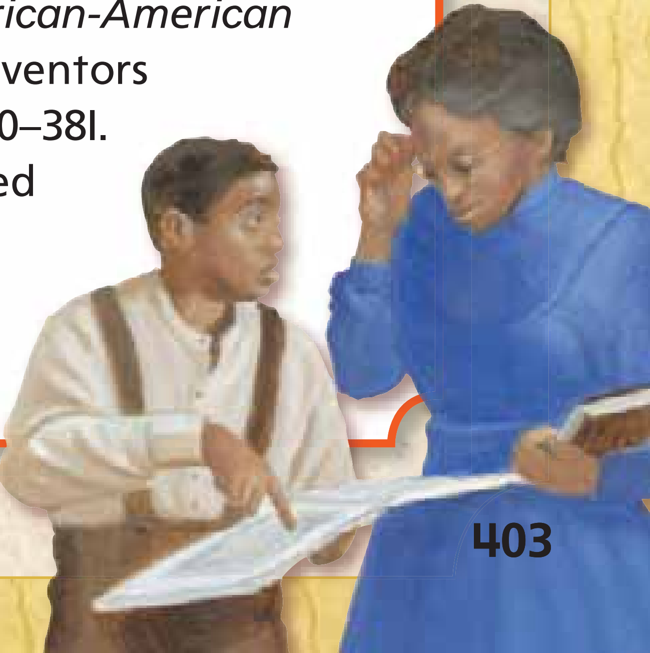
Retelling Cards

Think and Compare

1. How are all the inventors in this article alike? How are they different? **Reread: Compare and Contrast**



2. Reread pages 392–393. Why do you think Sarah Goode's cabinet bed was so popular? **Analyze**
3. Which inventions in this selection do you think helped the most people? **Evaluate**
4. Why do you think most inventors want patents for their inventions? **Synthesize**
5. Compare the **products** in *African-American Inventors* to those in "Kid Inventors Then and Now" on pages 380–381. Which inventions are still used today? **Reading/Writing Across Texts**



Social Studies

Genre

Nonfiction gives facts and information about real people and events.

Text Feature

A **Time Line** is a line that shows dates of important events in the order in which they happened.

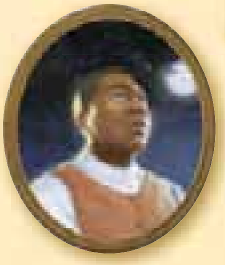
Content Vocabulary

predict

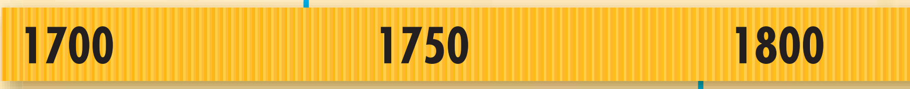
events

information

Inventors Time Line

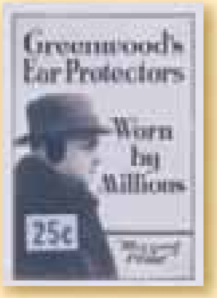


1731 - Benjamin Banneker is born.



1791 - Benjamin Banneker publishes an almanac. It helps **predict** weather for the coming year.

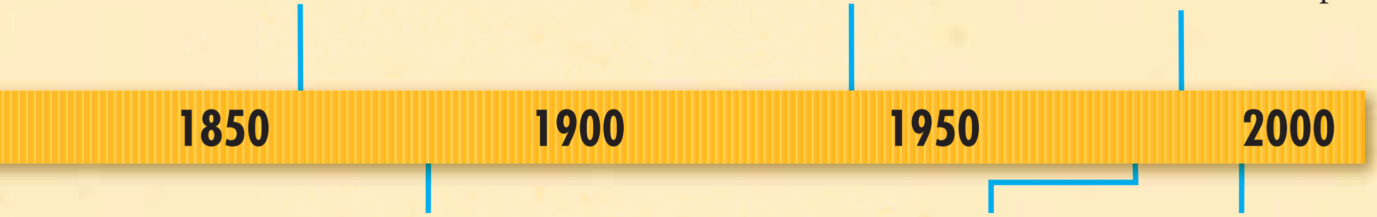
A time line is helpful for finding out when important **events** took place. The time line on these pages gives you **information** about some of the inventors you've read about this week. You can see when they were born and when they created their inventions.



1858 - Chester Greenwood is born.

1942 - Patricia Bath is born.

1988 - Dr. Bath receives a patent.



1873 - Chester Greenwood invents earmuffs.

1983 - K-K Gregory is born.

1993 - K-K Gregory invents Wristies.

Connect and Compare

1. Which was invented first, earmuffs or Wristies? How do you know? **Time Line**
2. Think about this time line and *African-American Inventors*. Choose one inventor from the selection and make a time line of his or her life. **Reading/Writing Across Texts**

Social Studies Activity

Research another famous inventor. Make a time line that shows important events in his or her life.

Find out more about inventors at
www.macmillanmh.com

Write a Biography

Writer's Craft

Important Details
Include **important details** to help make your writing clear and interesting. One way to do this is to use adverbs in your writing.

Grandpa Ben

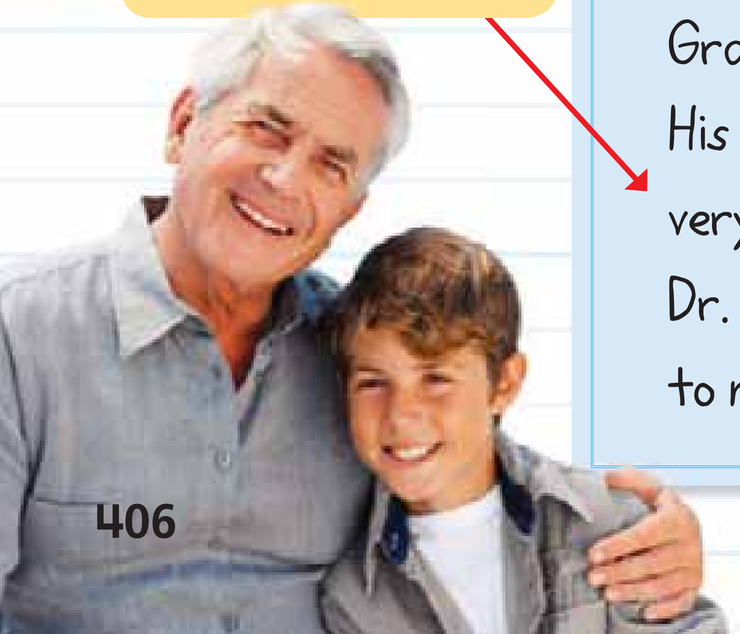
by Michael O.

My grandfather, Ben Rogers, is an interesting man. He was born in 1948 in California, and he has lived in ten different states. He married Grandma Lena when he was 24. They have four children.

Grandpa Ben is a scientist and an inventor. He works carefully in his lab. I always know when Grandpa Ben has a new idea. His eyes open wide, and he speaks very quickly. Many people call him Dr. Rogers, but he is Grandpa Ben to me!

My biography includes important details about Grandpa Ben's life.

I used adverbs to add important details about how Grandpa Ben works and speaks.



Your Turn

Write a biography of someone in your family or someone you know well. Ask the person questions about his or her life to add important details to your writing. Try to use adverbs in your biography. Use the Writer's Checklist to check your writing.

Writer's Checklist

☐ **Ideas:** Is my biography clear? Did I add enough important details about the person?

☑ **Organization:** Does my writing stick to the topic?

☑ **Conventions:** Did I use adverbs correctly?

☑ **Sentence Fluency:** Do my sentences begin in different ways? Does my writing flow when it is read aloud?

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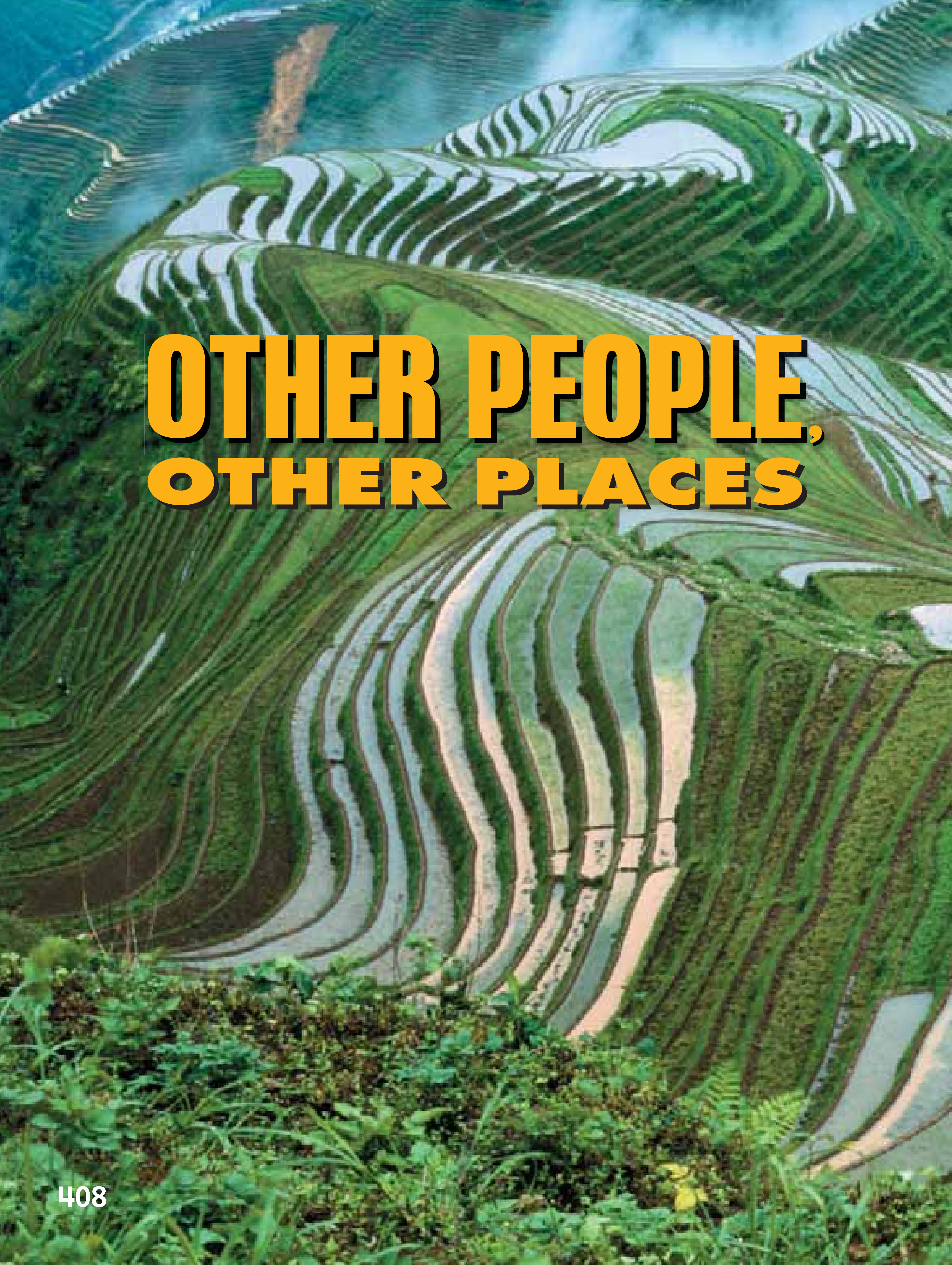
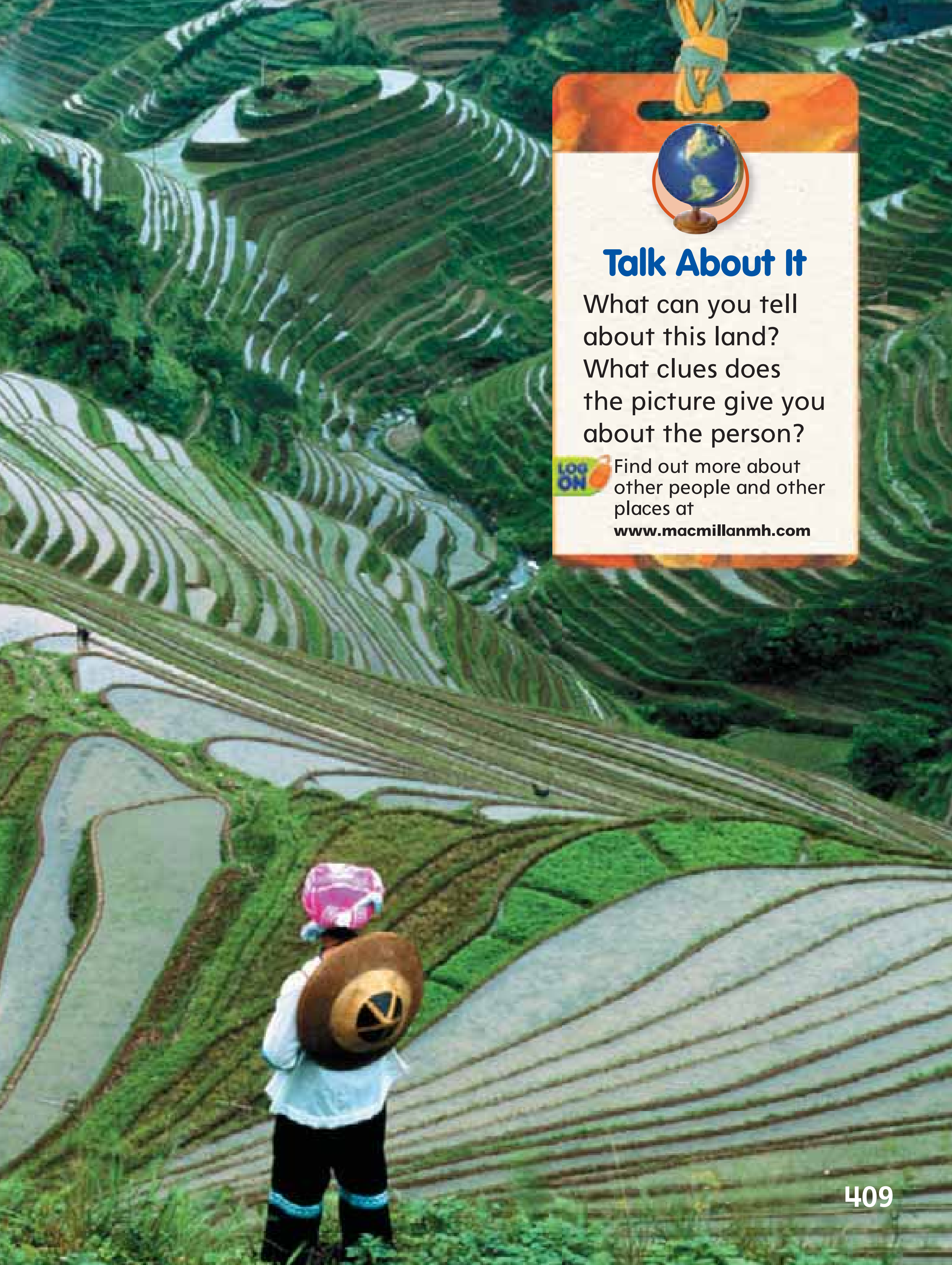
OTHER PEOPLE, OTHER PLACES





Talk About It

What can you tell about this land? What clues does the picture give you about the person?

LOG ON Find out more about other people and other places at
www.macmillanmh.com

E-mails from Other Places

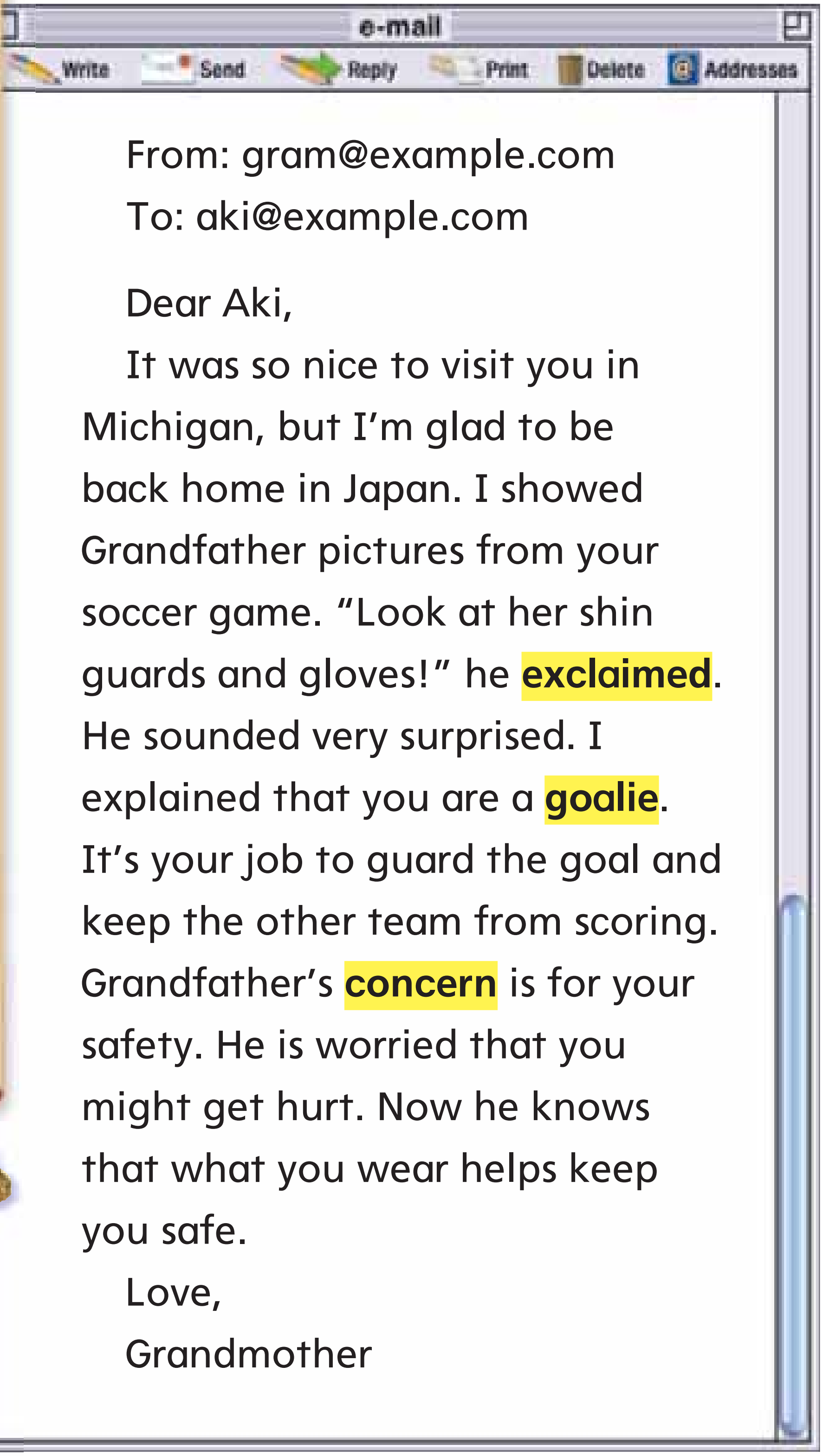
Vocabulary

exclaimed
goalie
concern
vendors
figure
collection

Context Clues

To figure out the meaning of a word, look at how it is used in the sentence. Use context clues to help you figure out the meaning.

The statue showed the *figure* of a man. *Figure* means "form" or "shape."

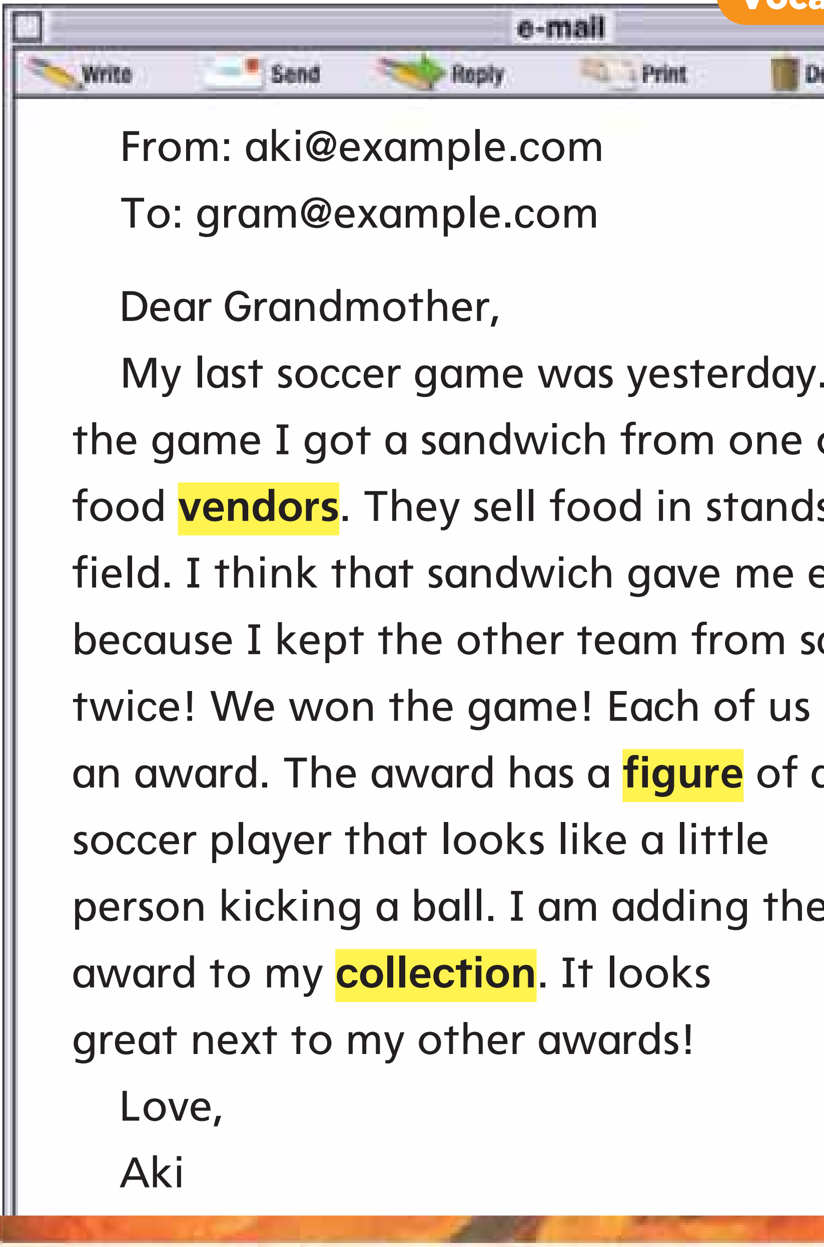


From: gram@example.com
To: aki@example.com

Dear Aki,

It was so nice to visit you in Michigan, but I'm glad to be back home in Japan. I showed Grandfather pictures from your soccer game. "Look at her shin guards and gloves!" he **exclaimed**. He sounded very surprised. I explained that you are a **goalie**. It's your job to guard the goal and keep the other team from scoring. Grandfather's **concern** is for your safety. He is worried that you might get hurt. Now he knows that what you wear helps keep you safe.

Love,
Grandmother



From: aki@example.com
To: gram@example.com

Dear Grandmother,

My last soccer game was yesterday. Before the game I got a sandwich from one of the food **vendors**. They sell food in stands by the field. I think that sandwich gave me energy because I kept the other team from scoring twice! We won the game! Each of us got an award. The award has a **figure** of a soccer player that looks like a little person kicking a ball. I am adding the award to my **collection**. It looks great next to my other awards!

Love,
Aki

Reread for Comprehension

Reread

Character and Setting

Rereading a selection can help you understand more about the characters and the setting. Reread the e-mails and use the chart to help you understand the people in the e-mails and where they take place.

Characters	Setting

Comprehension

Genre

Realistic Fiction is a made-up story that could happen in real life.

Reread

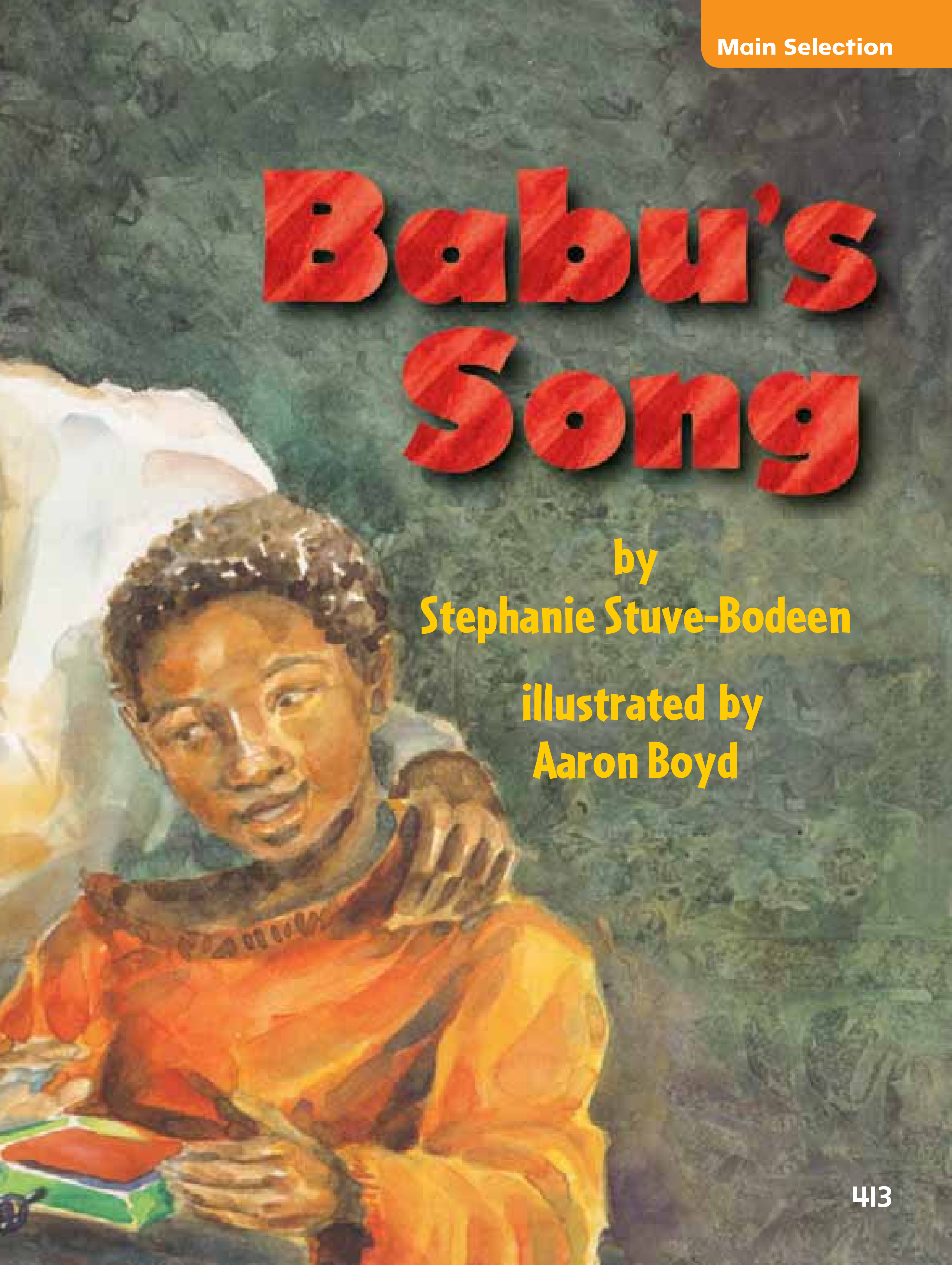
Characters and Setting

As you read, use your Characters and Setting Chart.

Characters	Setting

Read to Find Out

Who are Babu and Bernardi? Why do they get along so well?

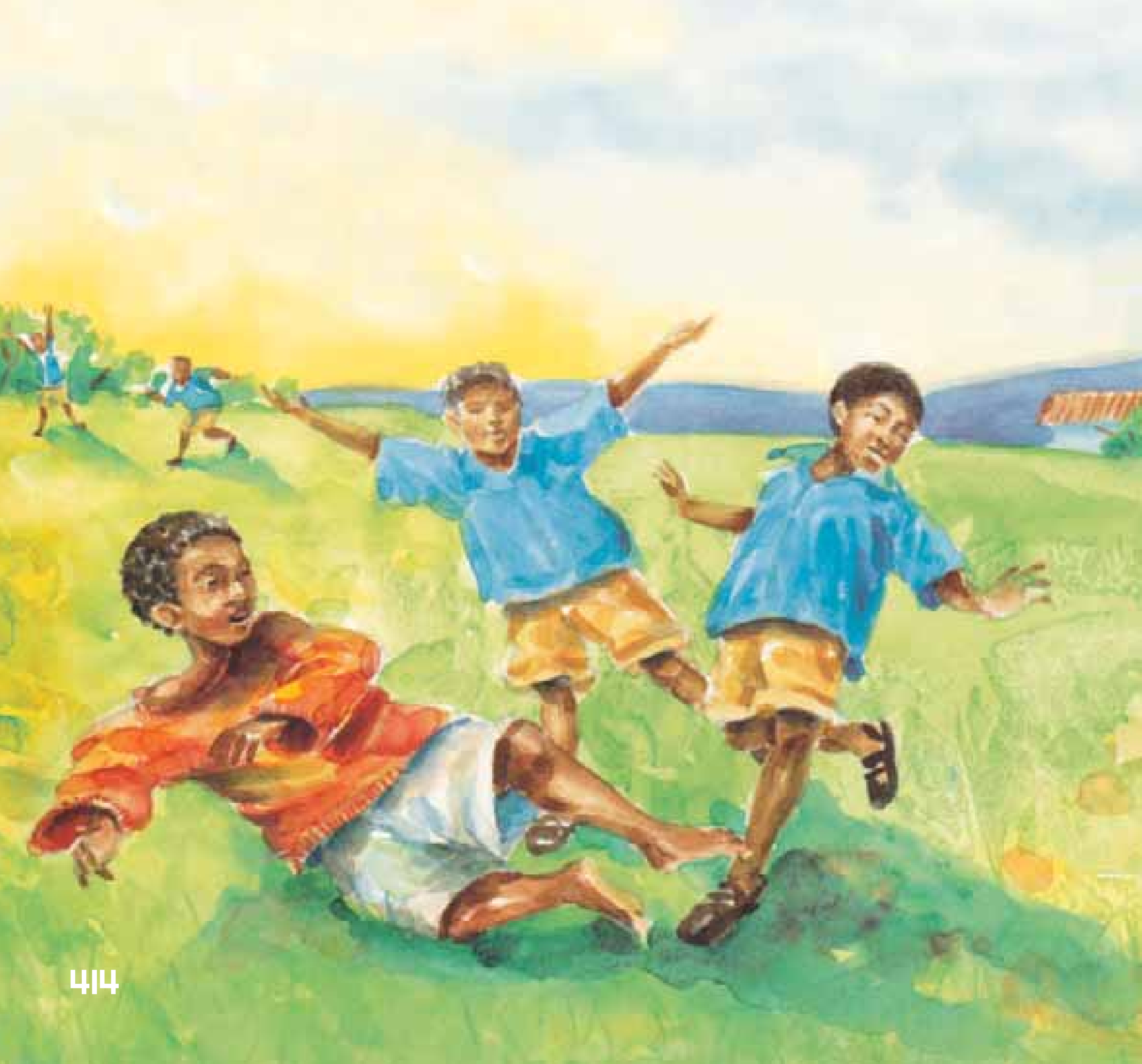


Babu's Song

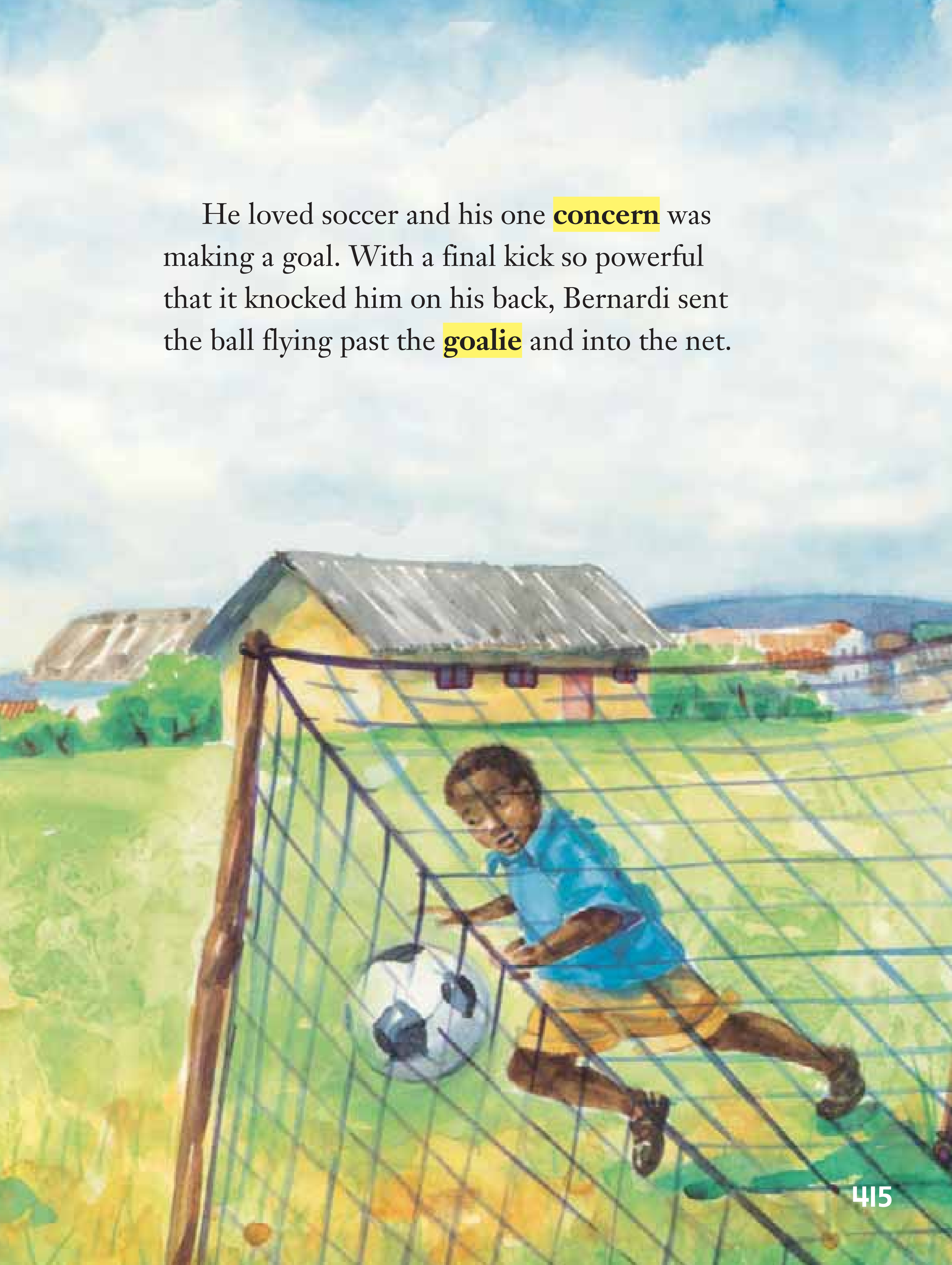
by
Stephanie Stuve-Bodeen

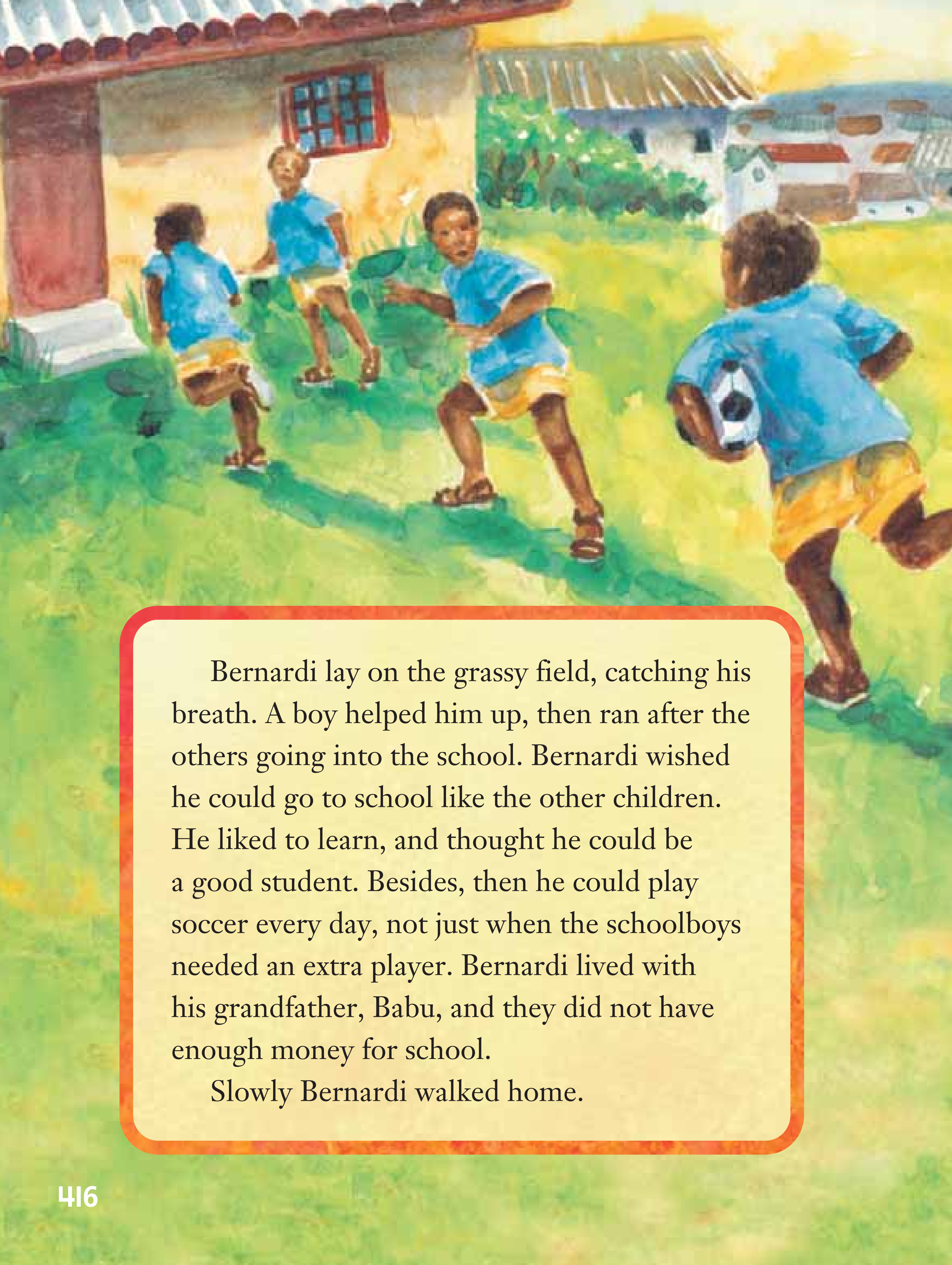
illustrated by
Aaron Boyd

Bernardi ran hard, kicking the ball toward the goal. His arms pumping and his heart racing, he didn't care that he was the only boy on the field not wearing a school uniform.



He loved soccer and his one **concern** was making a goal. With a final kick so powerful that it knocked him on his back, Bernardi sent the ball flying past the **goalie** and into the net.



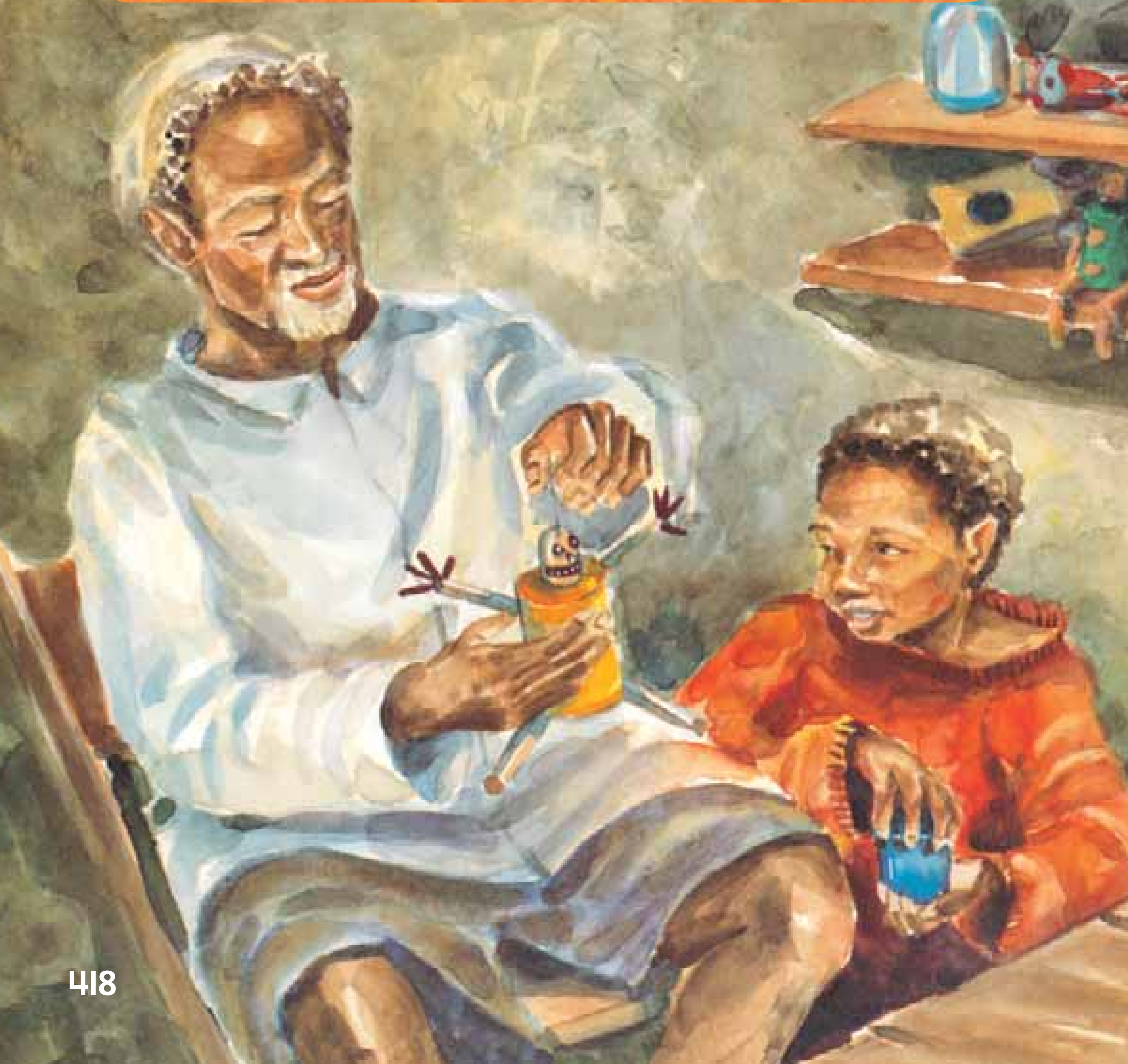


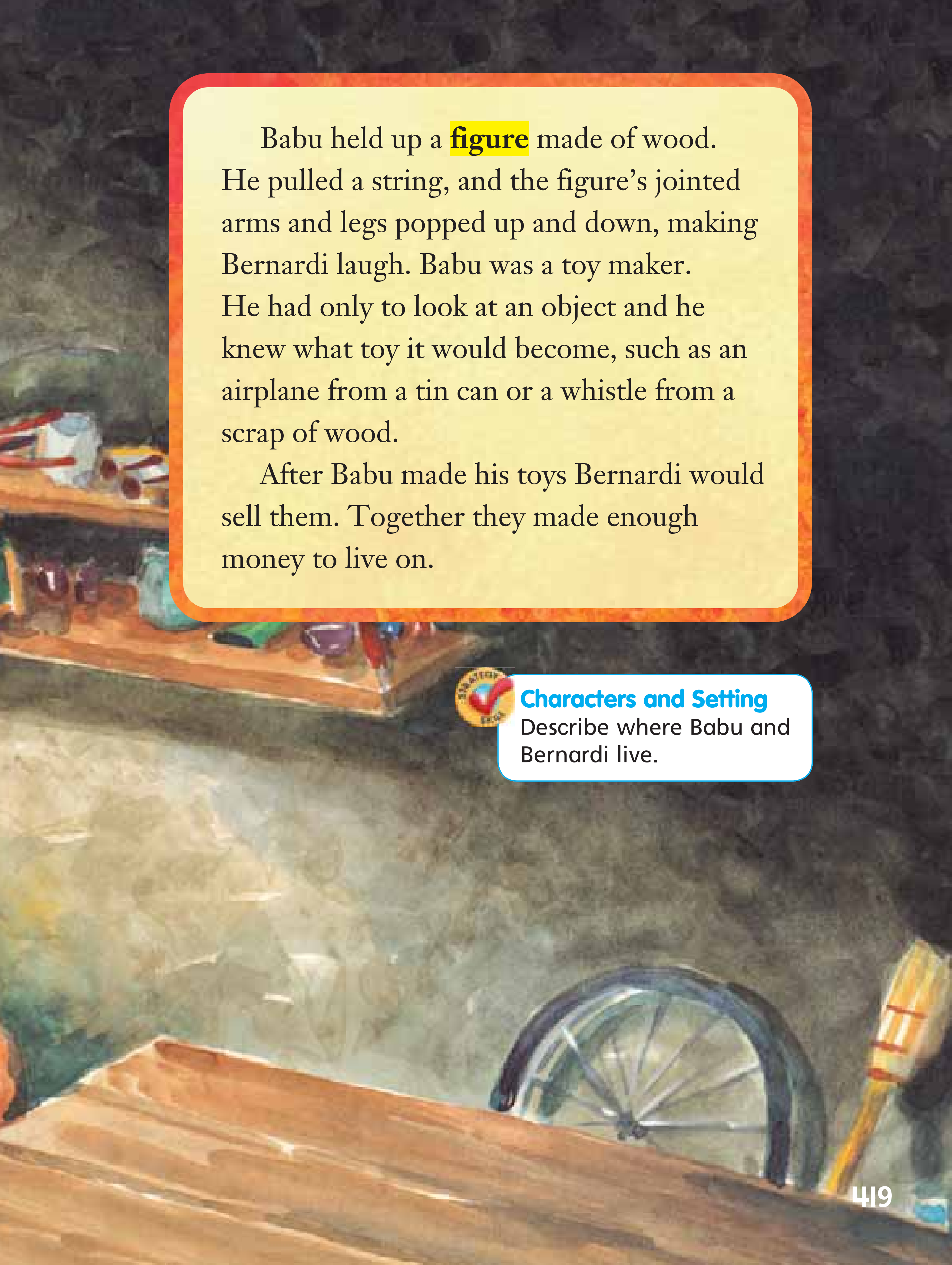
Bernardi lay on the grassy field, catching his breath. A boy helped him up, then ran after the others going into the school. Bernardi wished he could go to school like the other children. He liked to learn, and thought he could be a good student. Besides, then he could play soccer every day, not just when the schoolboys needed an extra player. Bernardi lived with his grandfather, Babu, and they did not have enough money for school.

Slowly Bernardi walked home.

When Bernardi walked in, Babu gave him a hug. This was how he said hello, because an illness had taken his voice a long time ago.

"Hello, Babu," Bernardi said. "I made a goal today." Bernardi loved telling Babu his soccer stories.

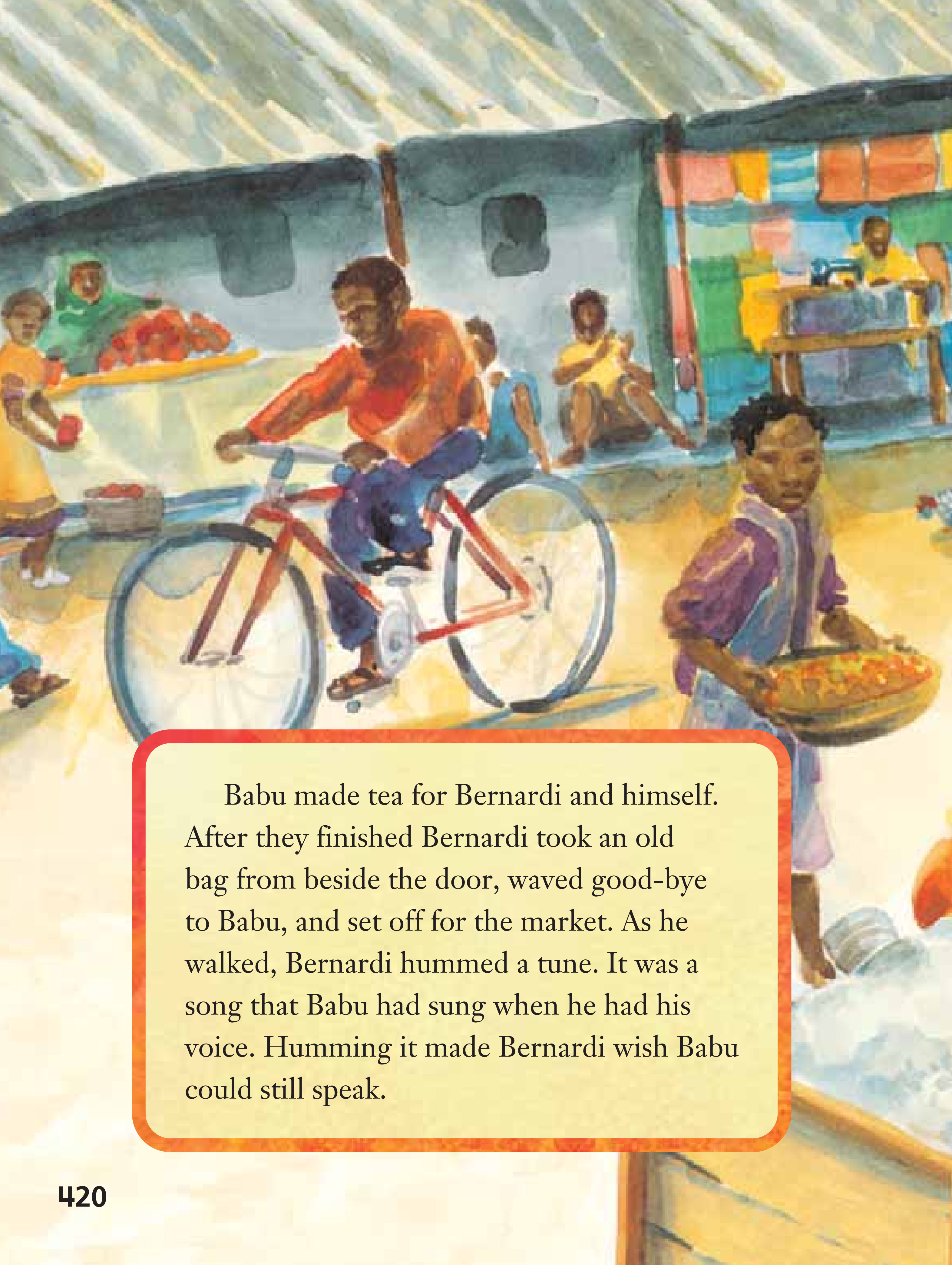




Babu held up a **figure** made of wood. He pulled a string, and the figure's jointed arms and legs popped up and down, making Bernardi laugh. Babu was a toy maker. He had only to look at an object and he knew what toy it would become, such as an airplane from a tin can or a whistle from a scrap of wood.

After Babu made his toys Bernardi would sell them. Together they made enough money to live on.

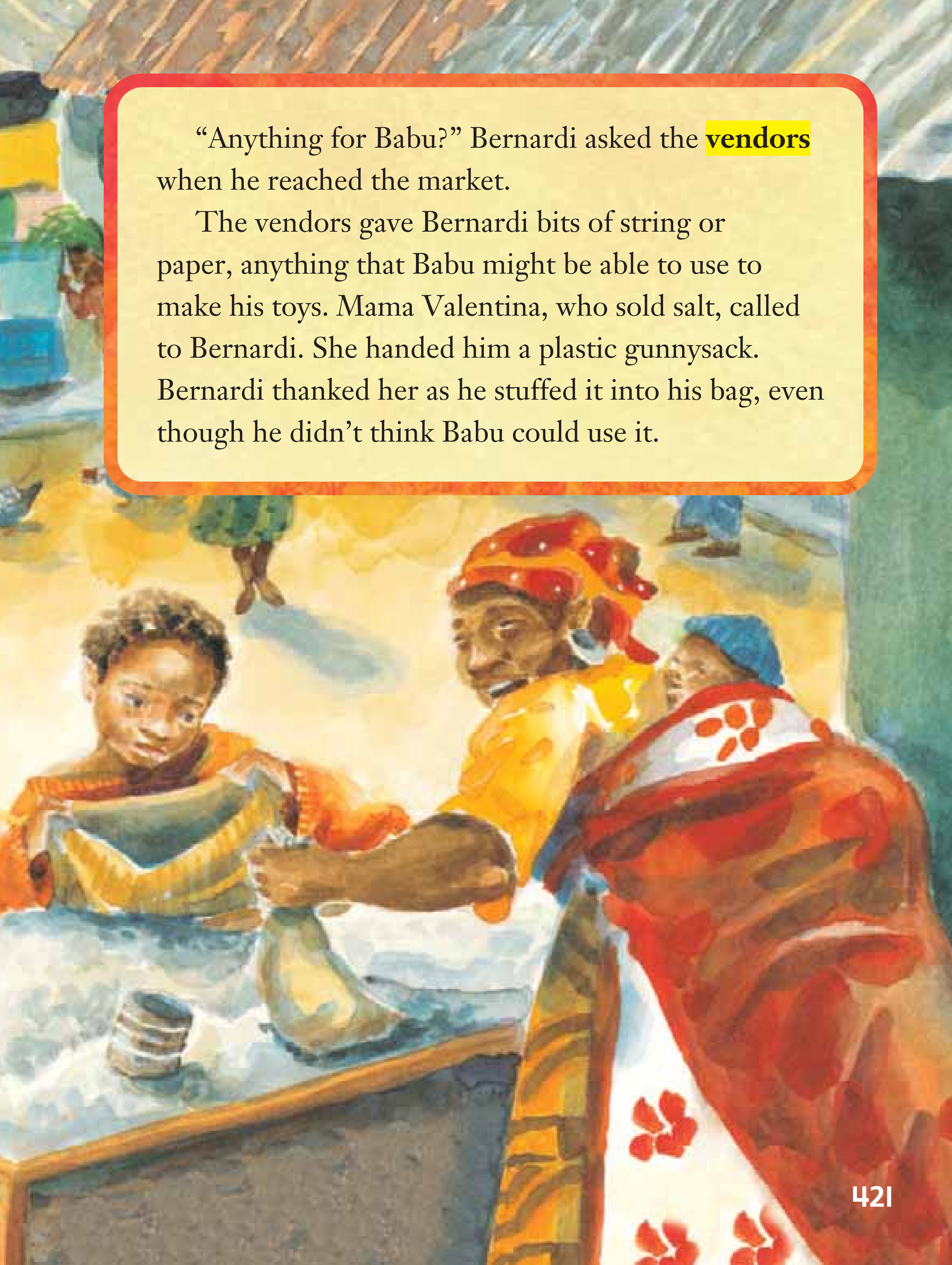
Characters and Setting
Describe where Babu and Bernardi live.



Babu made tea for Bernardi and himself. After they finished Bernardi took an old bag from beside the door, waved good-bye to Babu, and set off for the market. As he walked, Bernardi hummed a tune. It was a song that Babu had sung when he had his voice. Humming it made Bernardi wish Babu could still speak.

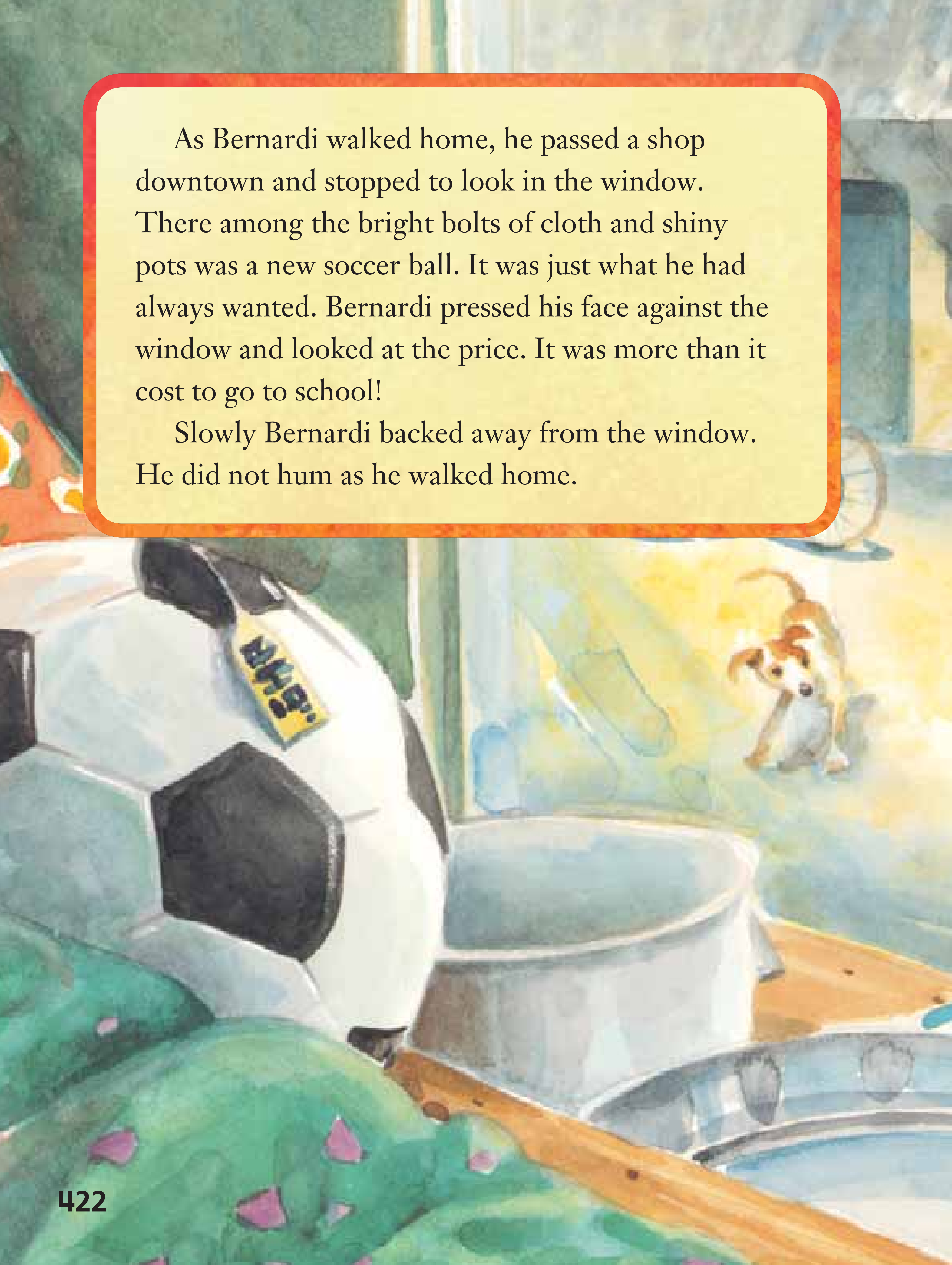
"Anything for Babu?" Bernardi asked the **vendors** when he reached the market.

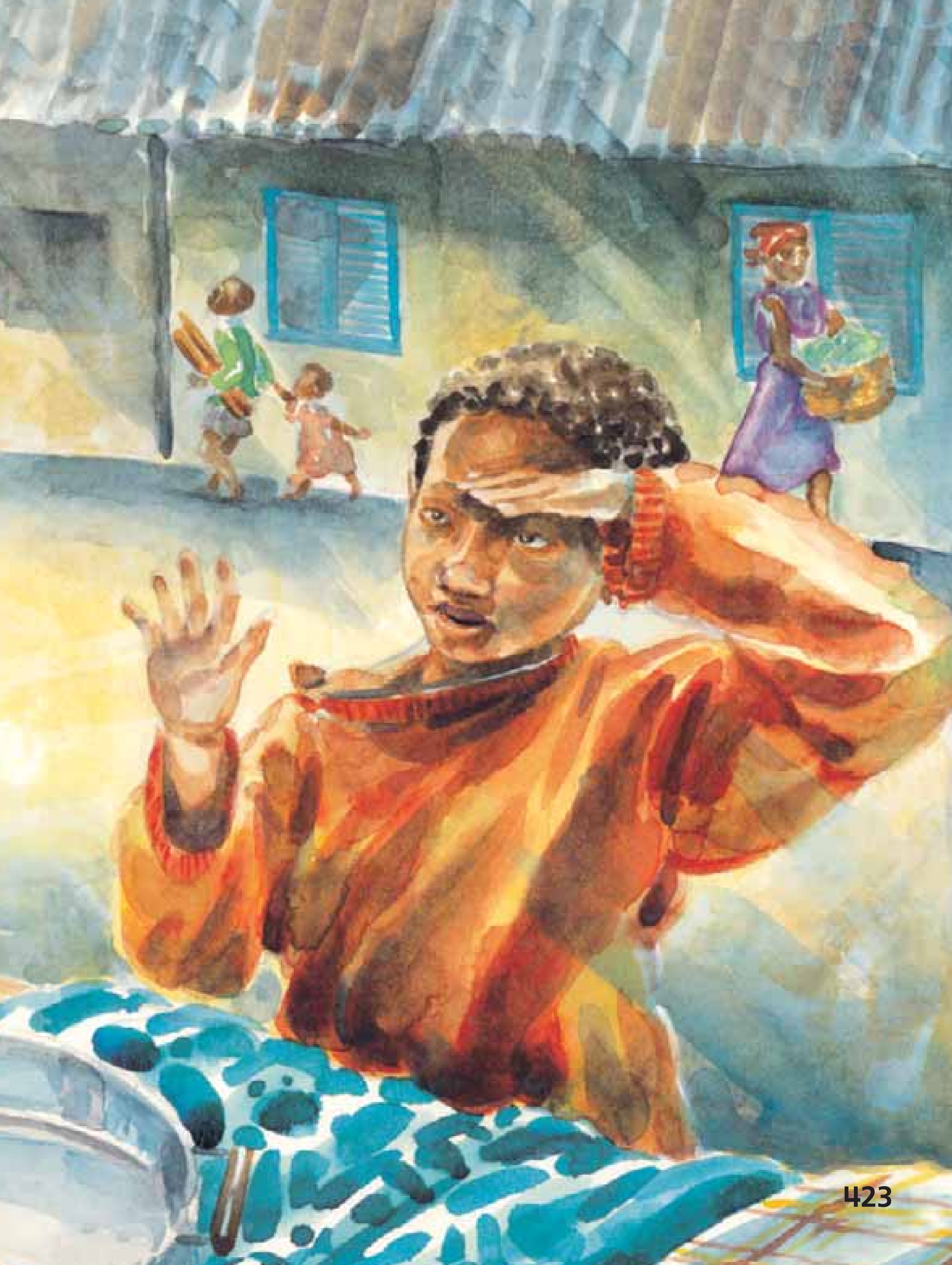
The vendors gave Bernardi bits of string or paper, anything that Babu might be able to use to make his toys. Mama Valentina, who sold salt, called to Bernardi. She handed him a plastic gunnysack. Bernardi thanked her as he stuffed it into his bag, even though he didn't think Babu could use it.



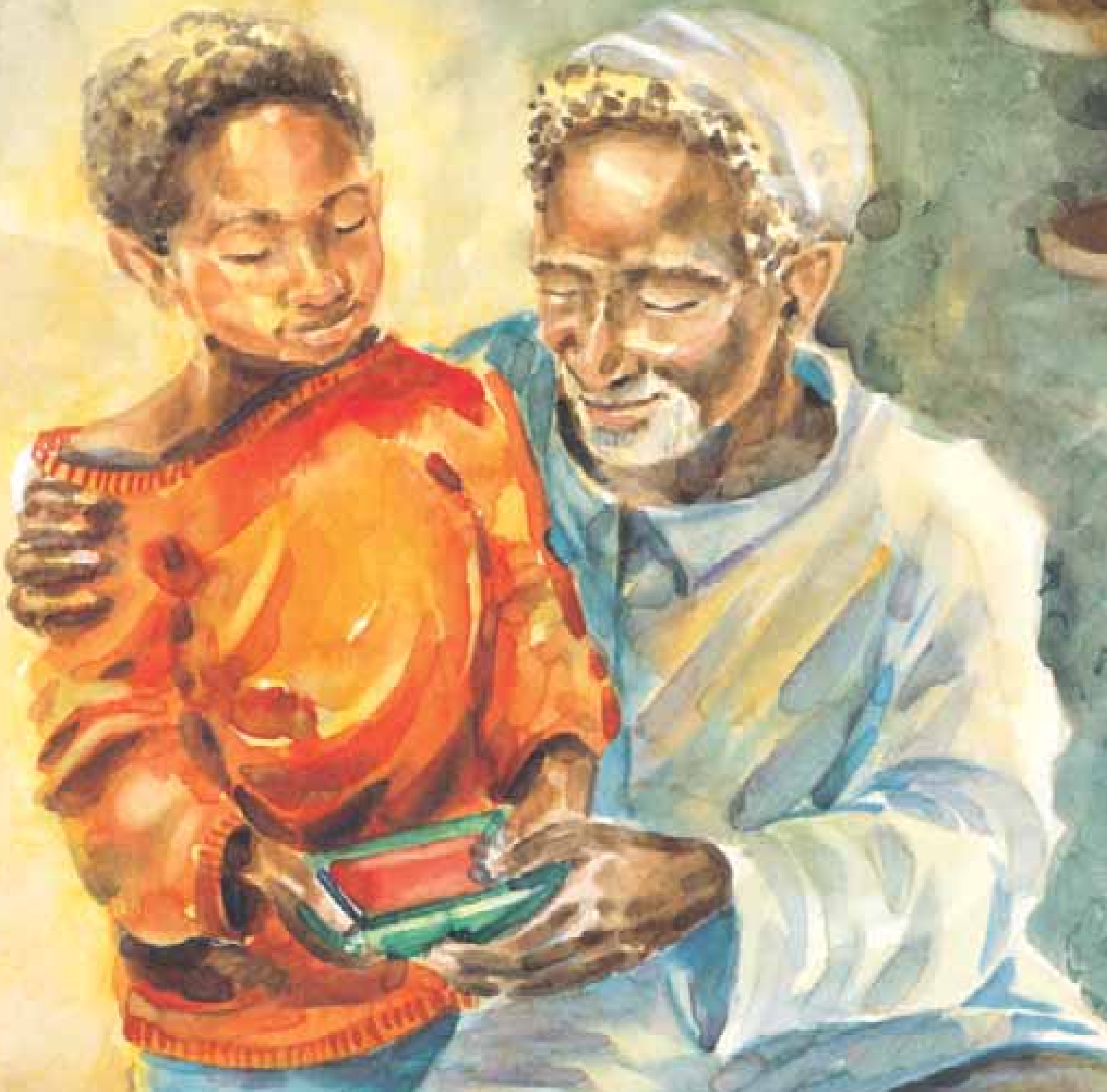
As Bernardi walked home, he passed a shop downtown and stopped to look in the window. There among the bright bolts of cloth and shiny pots was a new soccer ball. It was just what he had always wanted. Bernardi pressed his face against the window and looked at the price. It was more than it cost to go to school!

Slowly Bernardi backed away from the window. He did not hum as he walked home.



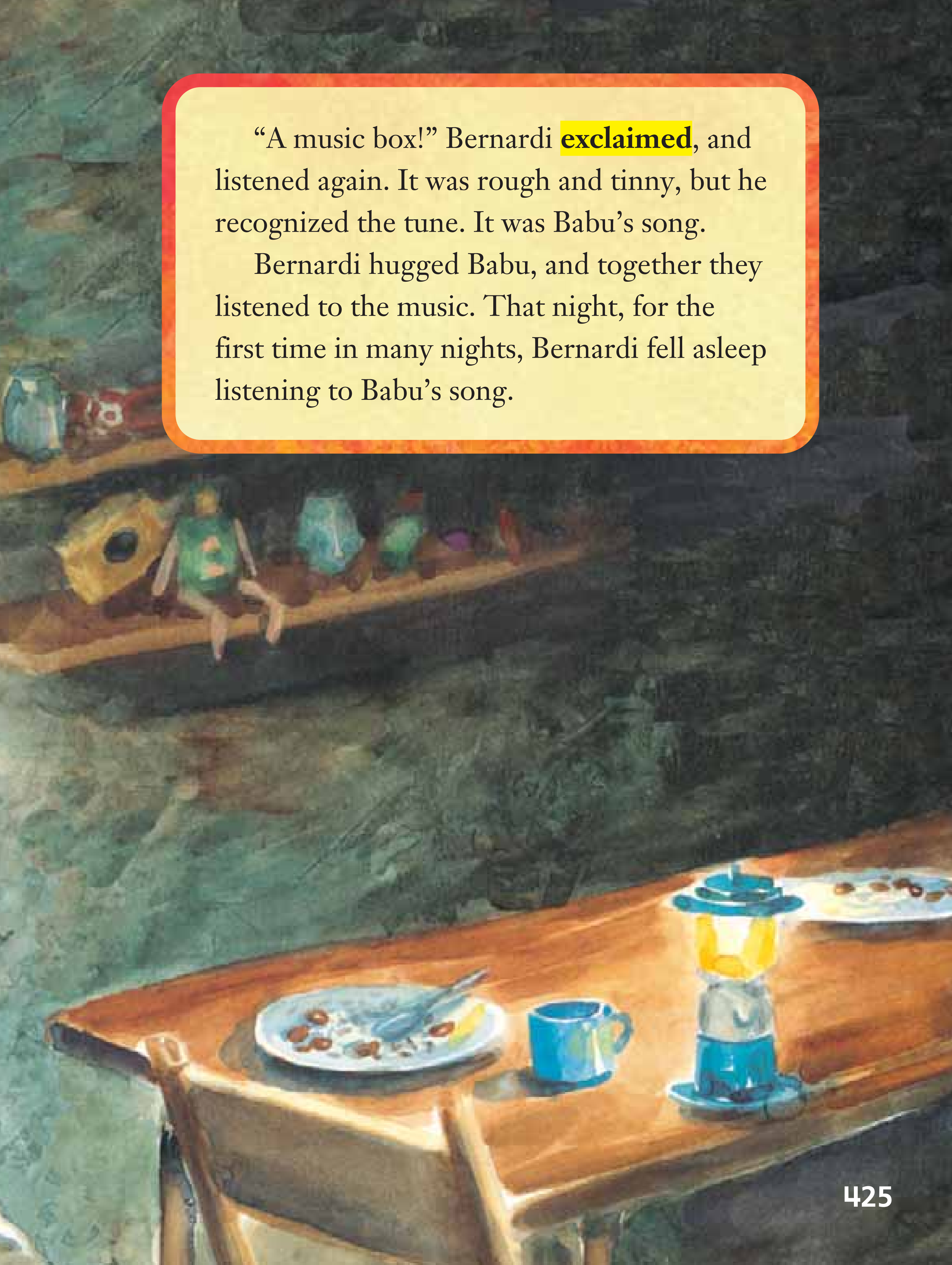


That evening Babu and Bernardi ate beans and rice by the light of the kerosene lamp. Babu put something by Bernardi's plate. Bernardi picked it up and held it closer to the light. It looked like a tin of lard. He opened the lid and heard a small tinkling.



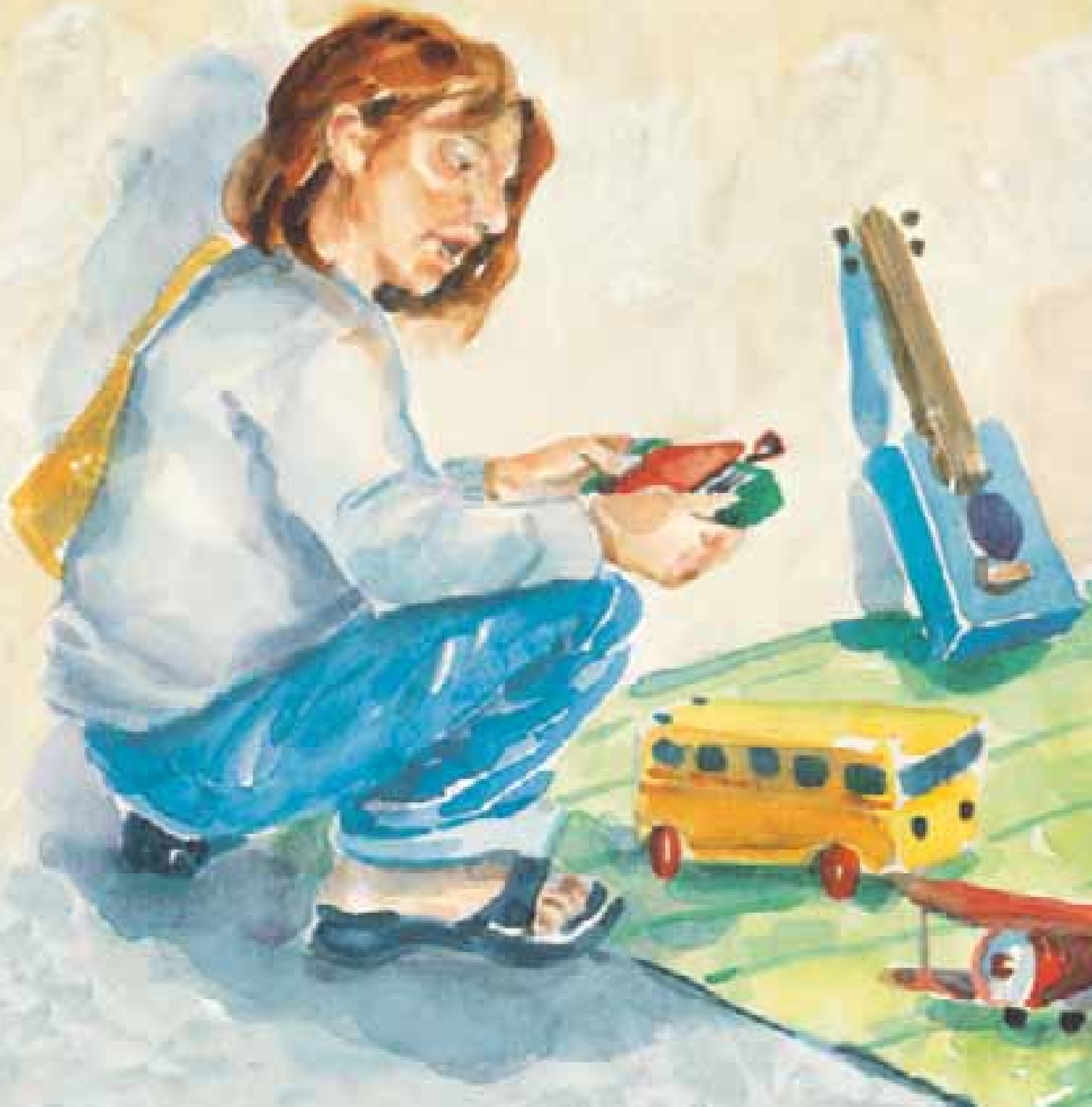
“A music box!” Bernardi **exclaimed**, and listened again. It was rough and tinny, but he recognized the tune. It was Babu’s song.

Bernardi hugged Babu, and together they listened to the music. That night, for the first time in many nights, Bernardi fell asleep listening to Babu’s song.

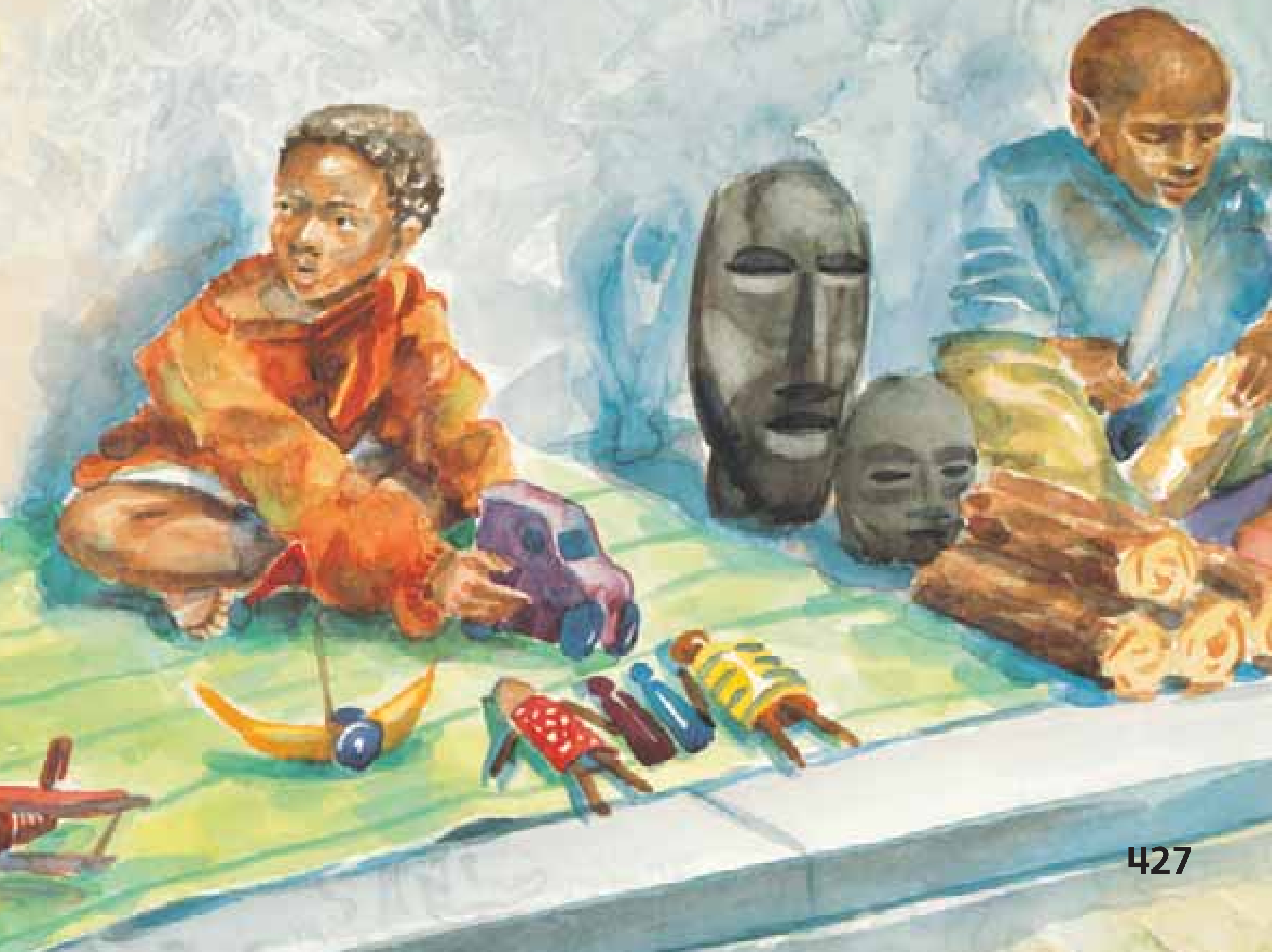


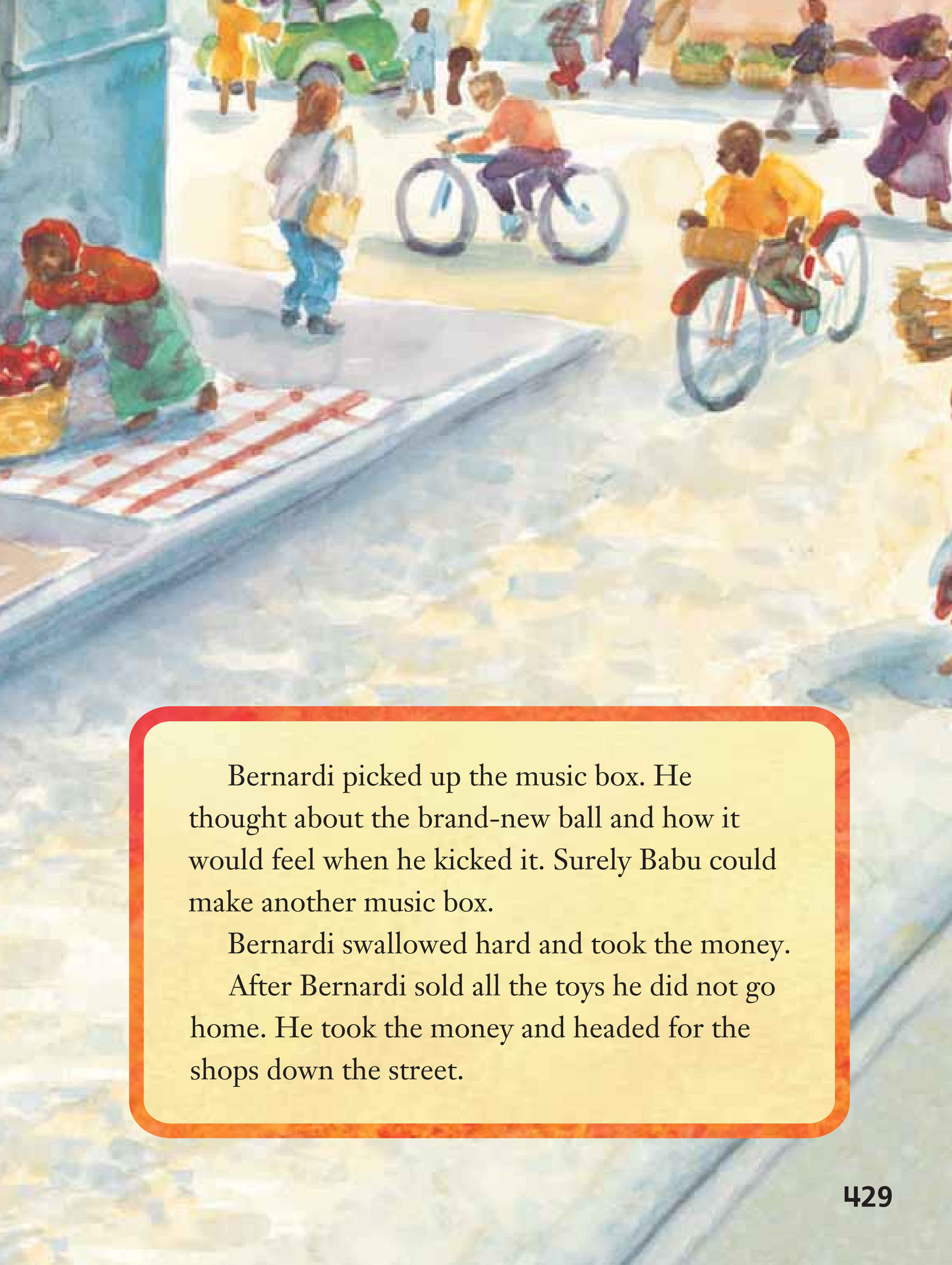
The next Saturday was a busy one for Bernardi, as it was the day he sold toys to tourists. He set up shop on his favorite corner downtown, arranging the toys on the curb.

Bernardi cranked the music box and listened to Babu's song tinkle out. He had sold a few things when a woman picked up the music box. She asked how much it was, but Bernardi said it wasn't for sale.



The woman did not give up. She told Bernardi that she wanted the music box for her **collection**, but still Bernardi shook his head. The woman held out a handful of money. Bernardi's eyes widened. It would be more than enough to buy the ball in the store window.





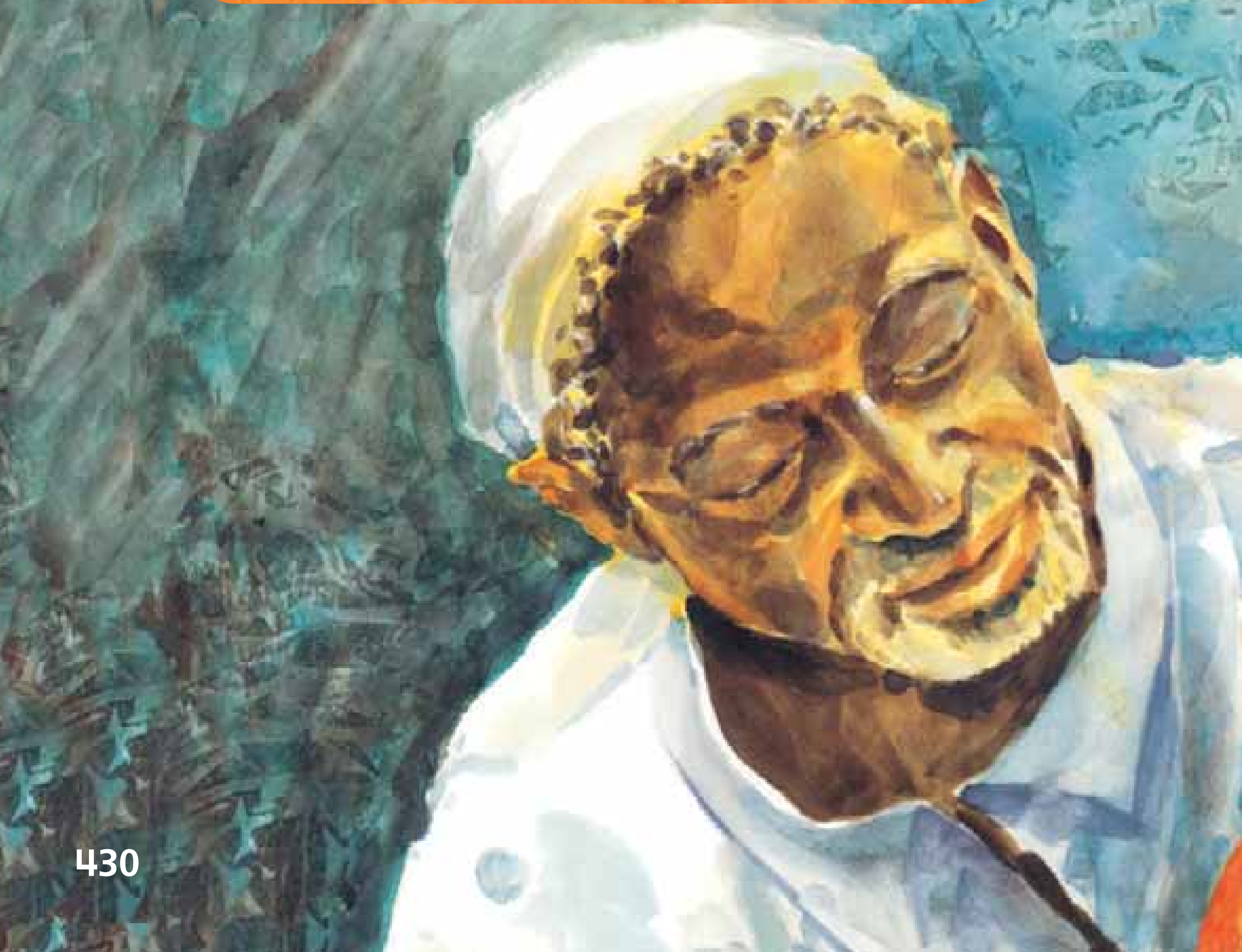
Bernardi picked up the music box. He thought about the brand-new ball and how it would feel when he kicked it. Surely Babu could make another music box.

Bernardi swallowed hard and took the money.

After Bernardi sold all the toys he did not go home. He took the money and headed for the shops down the street.

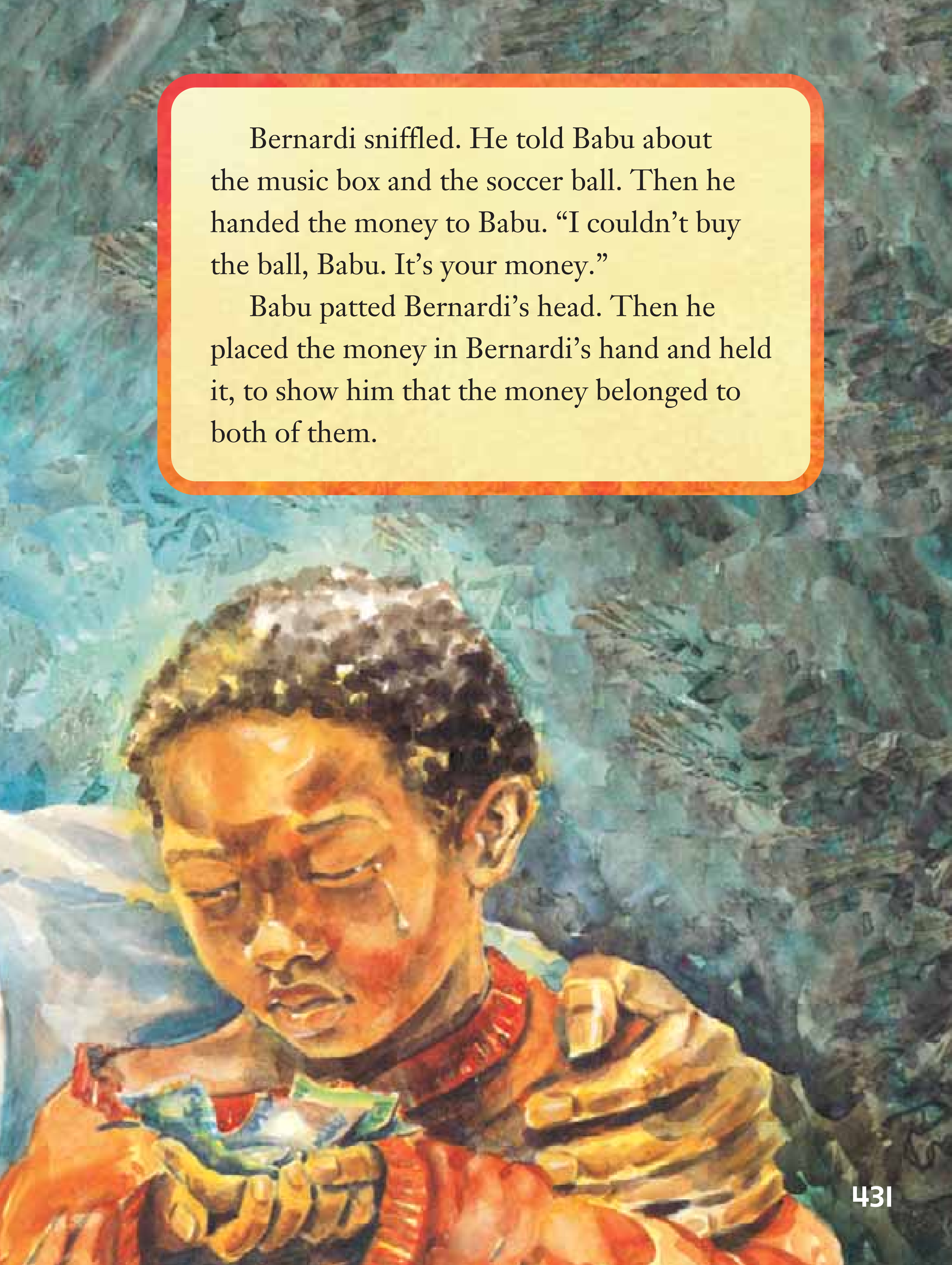
When Bernardi got home, Babu was cleaning. He looked up at Bernardi holding the empty bag.

"I sold everything, Babu!" Bernardi said, trying to sound cheerful, but then a tear rolled down his face. Babu went over to Bernardi. He wiped his grandson's face and waited. He knew Bernardi would tell him what was wrong.



Bernardi sniffled. He told Babu about the music box and the soccer ball. Then he handed the money to Babu. “I couldn’t buy the ball, Babu. It’s your money.”

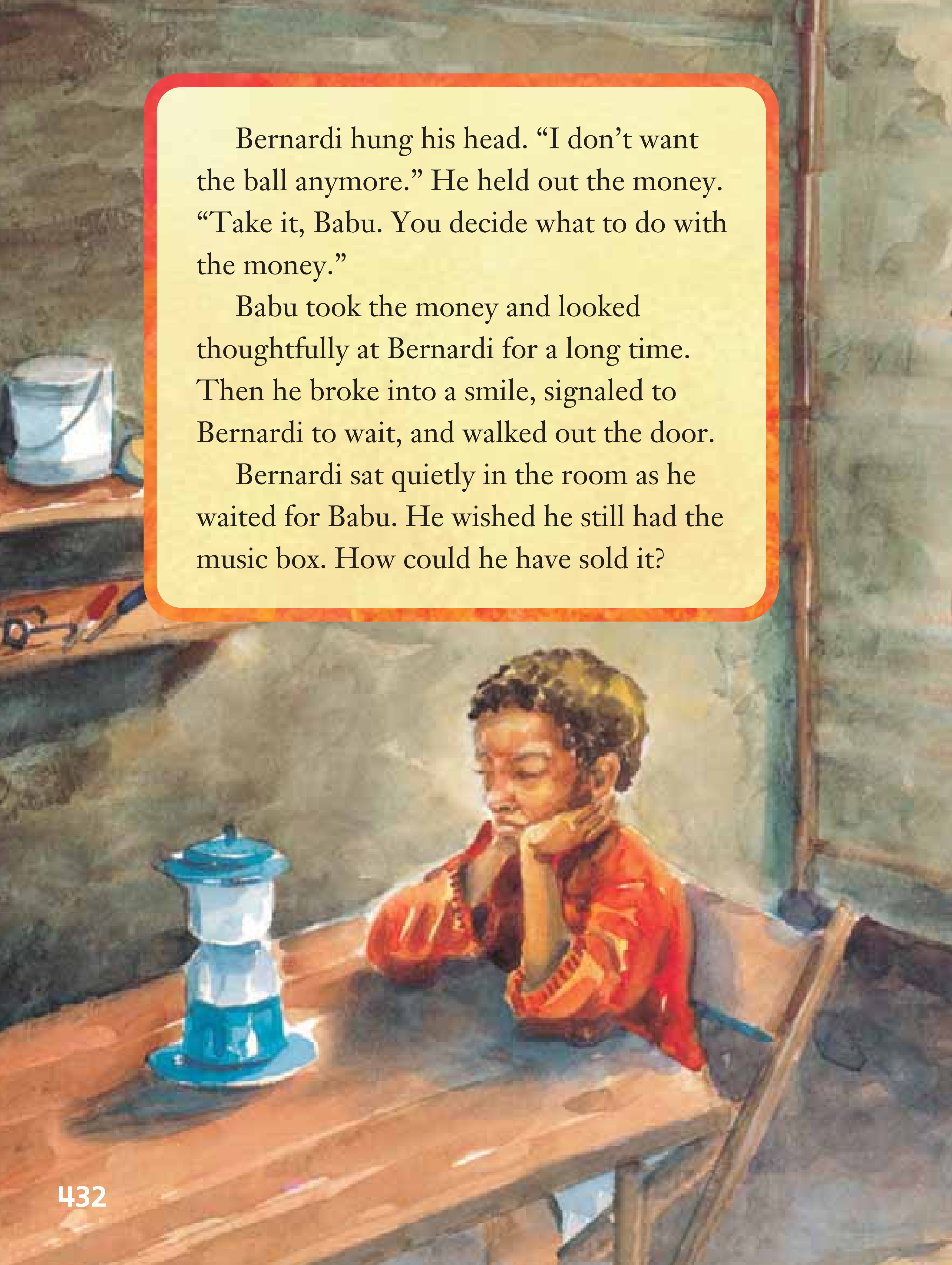
Babu patted Bernardi’s head. Then he placed the money in Bernardi’s hand and held it, to show him that the money belonged to both of them.



Bernardi hung his head. “I don’t want the ball anymore.” He held out the money. “Take it, Babu. You decide what to do with the money.”

Babu took the money and looked thoughtfully at Bernardi for a long time. Then he broke into a smile, signaled to Bernardi to wait, and walked out the door.

Bernardi sat quietly in the room as he waited for Babu. He wished he still had the music box. How could he have sold it?

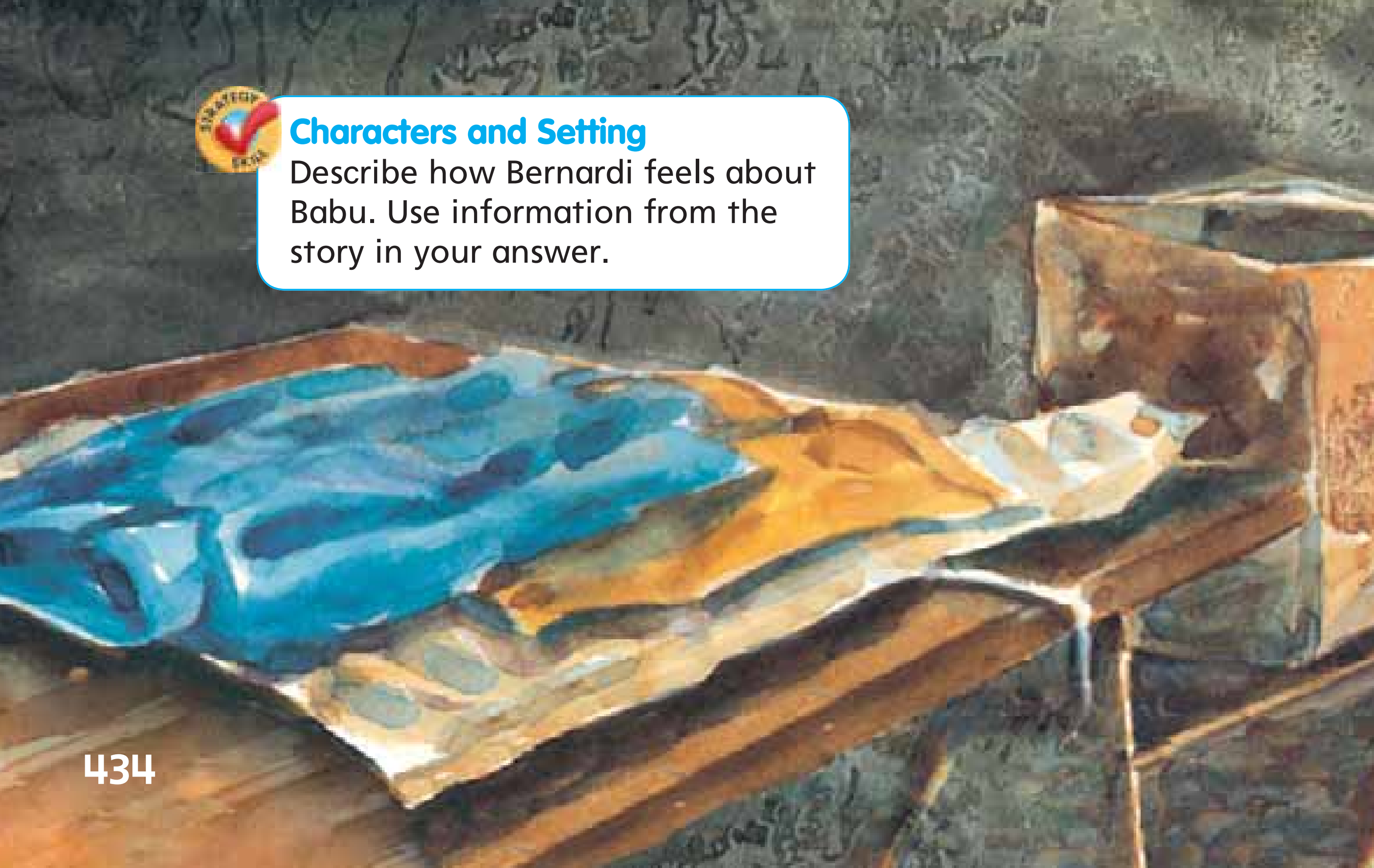


Bernardi was sitting in the lamplight when Babu returned holding a paper bag. Babu pulled out a package and handed it to Bernardi.

Bernardi choked back a sob. He untied the string and pulled back the brown paper. His eyes opened wide when he saw what was inside. It was a school uniform!

Bernardi looked at Babu. “You paid for me to go to school?”

Babu nodded. Bernardi jumped up and hugged his grandfather.

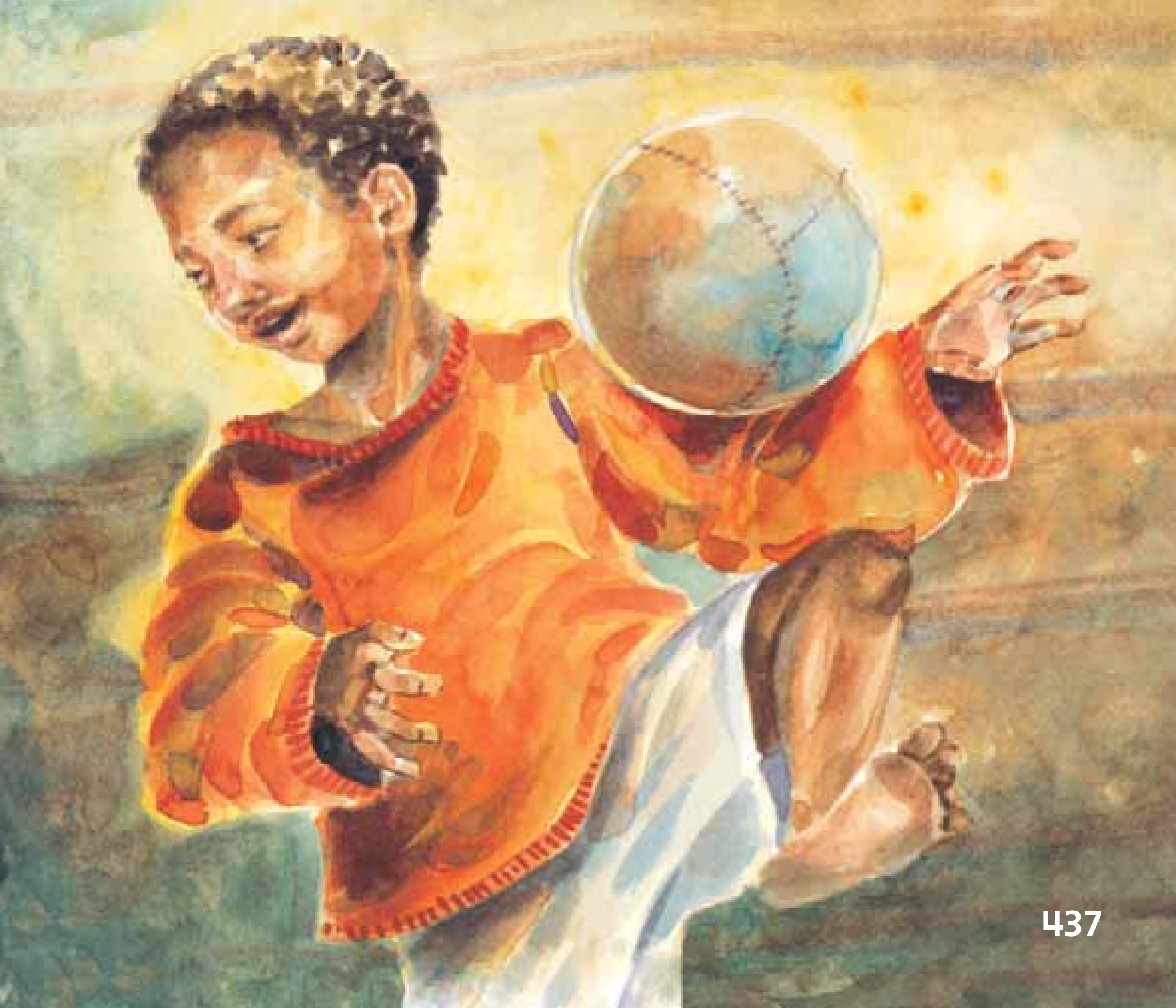


Characters and Setting
Describe how Bernardi feels about Babu. Use information from the story in your answer.

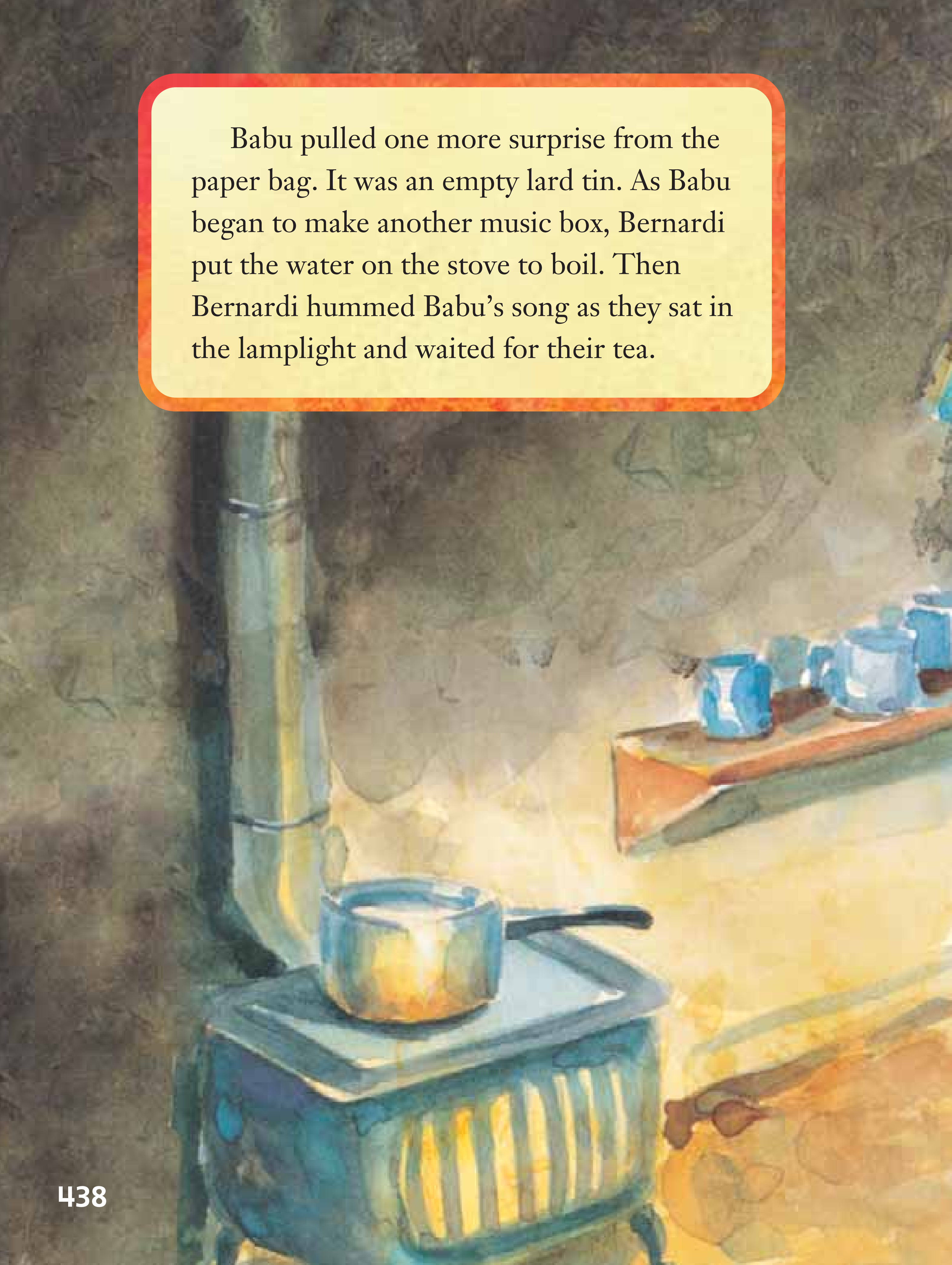
While Bernardi held the new uniform to his chest, Babu went back outside. He returned holding something behind his back. With a flourish Babu held out a soccer ball made from string and Mama Valentina's gunnysack.

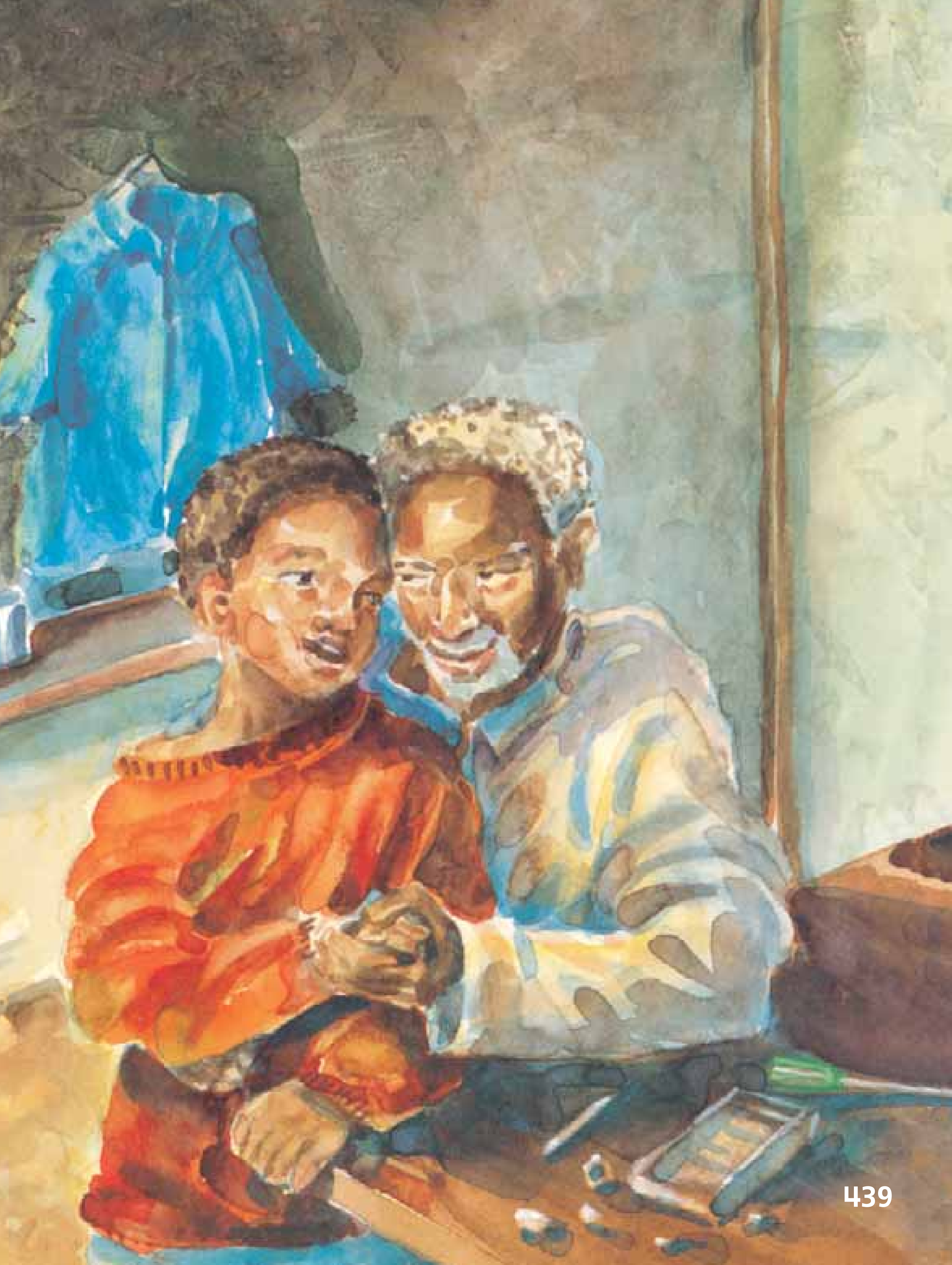
Bernardi put down his uniform and held the ball. He bounced it on one knee and it felt like the real thing.

"Thank you, Babu. It's wonderful!" Bernardi said to his grandfather and gave him a hug. Babu beamed. Bernardi decided that the ball was even better than the real thing.



Babu pulled one more surprise from the paper bag. It was an empty lard tin. As Babu began to make another music box, Bernardi put the water on the stove to boil. Then Bernardi hummed Babu's song as they sat in the lamplight and waited for their tea.



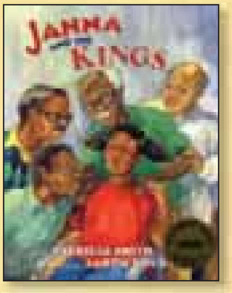


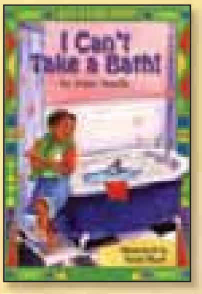
Exploring People and Places with Stephanie and Aaron

STEPHANIE STUVE-BODEEN once lived in a village in Tanzania, Africa. Tanzania is where this story takes place. While she was there, Stephanie lived near a school. It was like the one Bernardi wants to go to.

AARON BOYD knew he wanted to be an illustrator when he was just six years old. He would go to the library and study all the picture books. "I liked trying to read the story through just the pictures," he says. "It seemed very magical to me, making a story with pictures."

Other books illustrated by Aaron Boyd





LOG ON Find out more about Stephanie Stuve-Bodeen and Aaron Boyd at **www.macmillanmh.com**

Author's Purpose

Stephanie Stuve-Bodeen wrote about a boy and his special soccer ball to entertain you. Write about something that is special to you.

Comprehension Check

Retell the Story

Use the Retelling Cards to retell the story.

Retelling Cards

Think and Compare

1. How does the setting of the story help you understand Bernardi and Babu? **Reread: Character and Setting**

Characters	Setting

2. Reread page 422. Why doesn't Bernardi hum as he walks home after visiting the **vendors**? **Analyze**

3. How is Bernardi's life like yours? How is it different? Explain. **Evaluate**

4. Why do you think Bernardi feels sad when he can't go to school? **Analyze**

5. Compare Bernardi's life with his grandfather to Aki's and her grandmother's in "E-mails from Other Places" on pages 410–411. **Reading/Writing Across Texts**

Social Studies

Genre

A **Nonfiction Article** gives information and facts about a topic.

Text Feature

Maps show where places are located.

Content Vocabulary

climate
capital
democracy

Where in the World Is Tanzania?

by Jeff Mateo

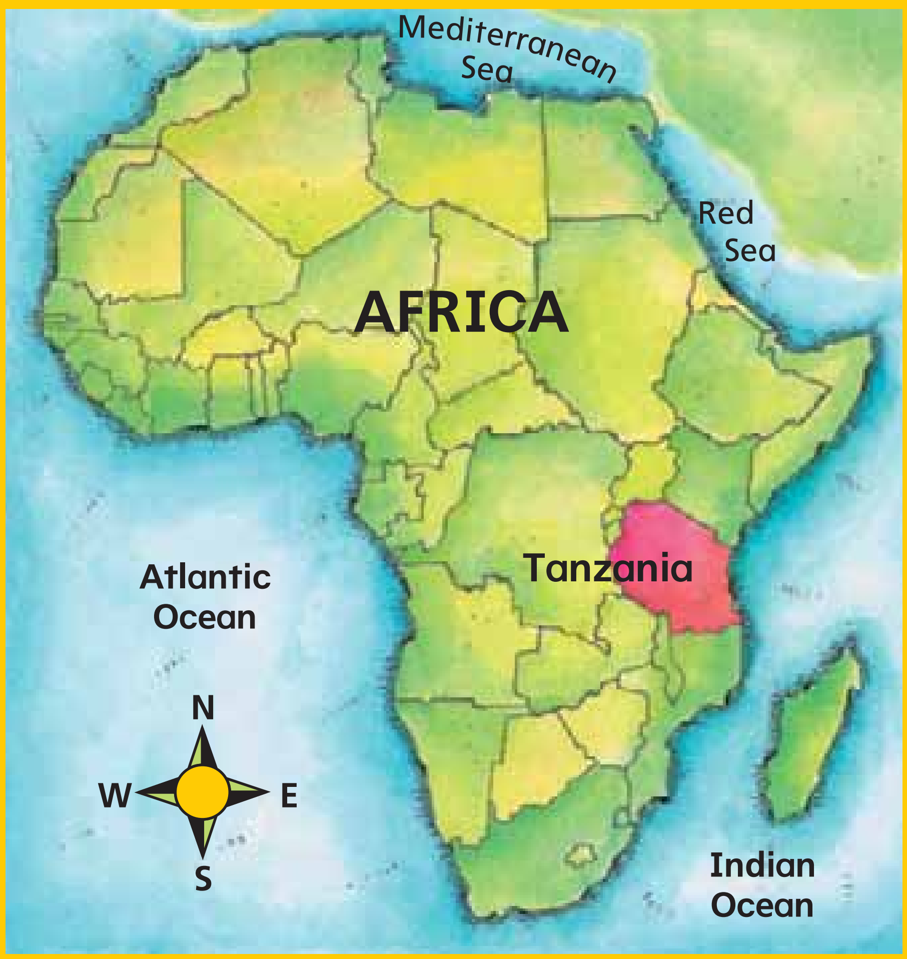
Africa is the second largest continent. It is so big that the United States could fit in it three times! Africa is between the Atlantic and Indian Oceans. It is south of the Mediterranean Sea. Africa has the hottest **climate** on Earth. This means the weather is hotter there than on any other continent.

There are 53 countries in Africa. Tanzania is a country in southeast Africa. Dodoma is its **capital** city. This is where the government is found. It is a **democracy**. This means that the people can for vote their leaders.

Tanzania has three types of land. The coastal area is long and flat. It is found along the Indian Ocean.

The plateau is large and flat. It is found in the middle of the country. It is covered in trees and tall grasses. A large part of it is the Great Rift Valley.

The mountains are in the west. The highest point is on Mount Kilimanjaro, which stands more than 19,000 feet tall.


Mediterranean Sea
Red Sea
AFRICA
Atlantic Ocean
Tanzania
N
W
E
S
Indian Ocean

This map shows you where the African country Tanzania is located.

More than 33 million people live in Tanzania. There are 120 different tribes of people and each has its own customs and beliefs. The national language is Kiswahili. Tanzanians may speak English as well as the languages of their tribes.

Each tribe, such as the Makonde and Masai, has its own traditions and dances. Visitors come to learn about the people and watch the dances. The dances tell exciting stories.

Many people in Tanzania are farmers and miners. They dig minerals and gems, such as gold and diamonds, out of the ground.

Other Tanzanians help the tourists who come to visit the country. They work in hotels and give tours. Some Tanzanians make and sell crafts to tourists. Tourism is a big business in Tanzania. People come from all over the world to see the amazing wildlife.

Tanzania has many wild animals, such as lions, zebras, giraffes, and baboons. Many live in national parks, which are animal sanctuaries. The workers help protect the animals and the places where they live.

Connect and Compare

1. Which ocean is next to Tanzania? **Map**
2. Think about this article and *Babu's Song.* What new information does the article give you about Bernardi's life in Tanzania? **Reading/Writing Across Texts**

Social Studies Activity

Research another country in Africa. Find it on a map. Write a short report about it.

Find out more about Africa at
www.macmillanmh.com

Write a Journal Entry

Writer's Craft

Transitions

Good writers use **transitions** between paragraphs to connect ideas.

I included the transition later at the beginning of this paragraph.

I used as a result to connect the ideas in the paragraphs.

April 14

Today we took the best class trip ever! We went to the zoo and spent the whole day with different zookeepers. We watched the keepers freeze apples in giant blocks of ice as treats for the huge polar bears.

Later, we looked inside the rooms where the animals spend the night. What a surprise! I thought zoo animals lived outside all the time.

As a result, I had the greatest time. Maybe I'll be a zookeeper when I grow up!

Your Turn

Write a journal entry about a place you have visited. Use lively words to express how you feel about the event. Be sure to use transition words to connect the ideas in paragraphs. Use the Writer's Checklist to check your writing.

Writer's Checklist

- ☐ **Word Choice:** Do **transitions** between paragraphs help connect ideas?
- ☑ **Voice:** Does my writing express my feelings about my topic?
- ☑ **Ideas:** Is my description clear? Did I add enough details?
- ☑ **Conventions:** Did I begin every sentence with a capital letter? Does every sentence have the correct end punctuation?

Test Strategy

Author and Me

The answer is not there on the page. Think about the whole passage.

THE MOTHER OF THE BABY BACKPACK

by Jeff Mateo

Maybe you rode in one. Your baby brother or sister might be in one right now. What is it? It's a baby carrier! A baby carrier is like a backpack for carrying a baby. Ann Moore introduced the idea of a baby carrier to American people more than 40 years ago.

Ann spent two years in Africa in the early 1960s. She worked as a nurse. Ann saw babies cradled in bright cloth wraps tied to their mothers' backs. The babies snuggled close to their mothers. The babies looked happy. The mothers could use their hands to do other things.

African mothers carry their babies everywhere they go.

Go on

Ann Moore's baby carriers were very useful to parents.

In 1964, Ann had her own baby. She tried making a carrier like the one African mothers used. The carrier was like a backpack. Everywhere Ann went with her baby in the carrier, people asked, "Where can I buy one?"

In 1965, Ann and her mother started a business. They sold two handmade carriers a month. When the baby carrier appeared in a catalog, many more people wanted it.

Ann received a patent for the baby carrier in 1969. By that time, the baby carrier had leg holes and straps that could be made longer or shorter. It could also be worn on the back or front.

By 1979, the baby carriers were made in a factory. These baby carriers cost less to make and more than 25,000 were sold every month. In 1985, Ann sold the company.

Go on ▶

When Ann made her first baby carrier, she just wanted to keep her baby close and still have her hands free to do other things. Ann said, "I didn't invent the idea. I took an age-old idea … and just adapted it." Now all over the world babies ride in baby carriers, close to parents, safe and happy. And those moms and dads can give Ann Moore a hand!

Moms and dads give Moore's baby carrier a hand!

Go on

Tip

Think about the whole passage.

Directions: Answer the questions.

1. **Why did people ask Ann where they could buy a carrier?**

   A They didn't know how to make it.
   B Ann knew where to buy it.
   C They liked it and wanted their own.
   D They couldn't go to Africa.

2. **Why do people invent new things?**

   A to follow a family business
   B to prove they are better than others
   C to copy what other people have
   D to make people's lives easier

3. **Do you think Ann Moore is a problem-solver or an inventor? Explain why.**

Writing Prompt

What invention can't you live without? Write a paragraph telling why the invention is important to you.

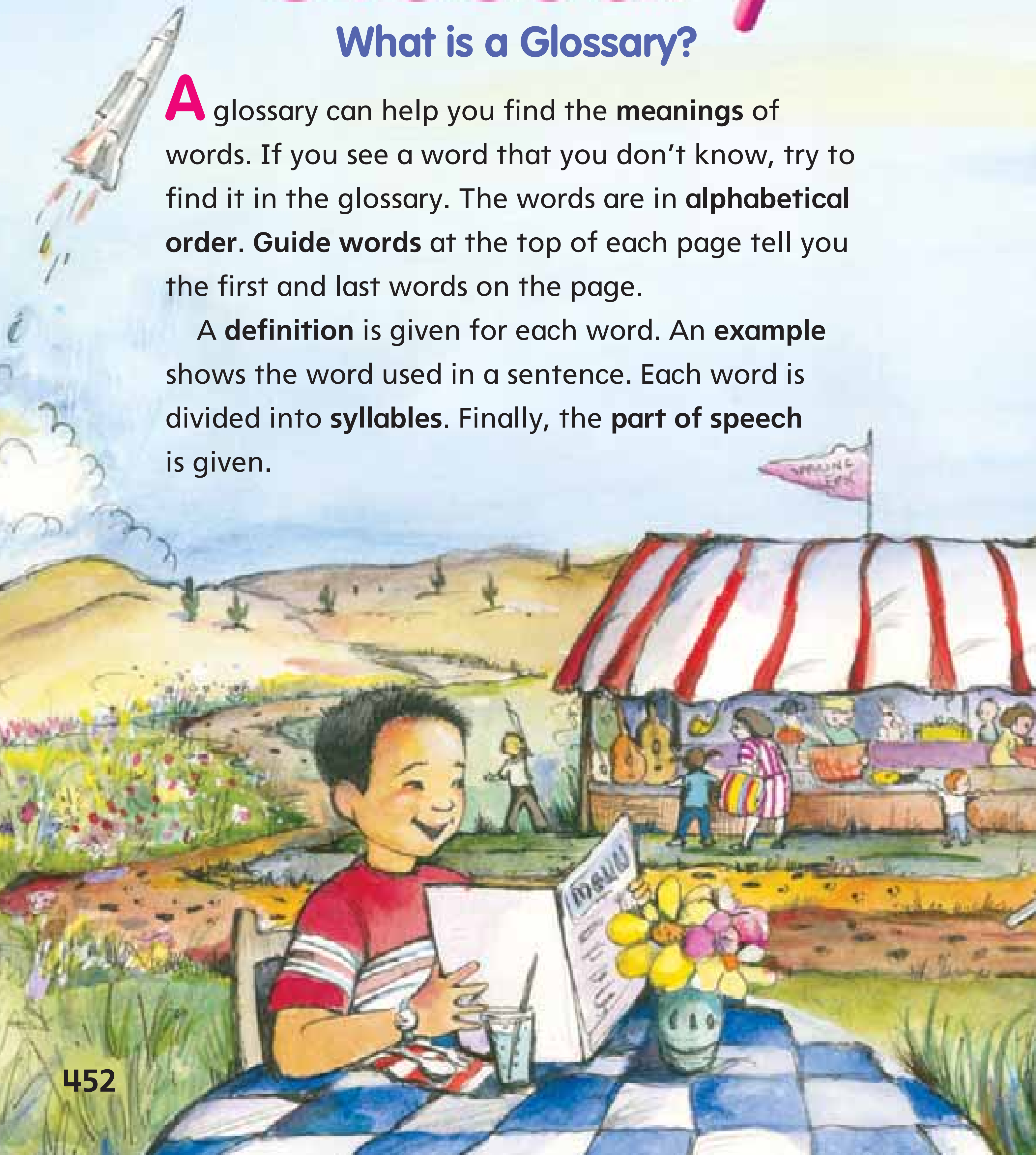
STOP

Glossary

What is a Glossary?

A glossary can help you find the **meanings** of words. If you see a word that you don't know, try to find it in the glossary. The words are in **alphabetical order**. **Guide words** at the top of each page tell you the first and last words on the page.

A **definition** is given for each word. An **example** shows the word used in a sentence. Each word is divided into **syllables**. Finally, the **part of speech** is given.



blooming/concern

Guide Words

First word on the page

Last word on the page

Sample Entry

Definition

Main entry

burrow A hole dug in the ground by an animal. *A gopher lives in an underground **burrow**.*

Example sentence

Syllable division

bur•row *noun.*

Part of Speech

Aa

adapted Made or became used to. *When he moved to Alaska, he **adapted** to the cold weather.*

a·dapt·ed *verb.* Past tense of **adapt**.

agreed To have thought or felt the same way as someone else. *My friends all **agreed** it was a good book.*

a·greed *verb.* Past tense of **agree**.

allowed Let someone do something. *David **allowed** Jen to use his camera.*

al·lowed *verb.* Past tense of **allow**.

appeal To be attractive or interesting. *Does playing a board game **appeal** to you now?*

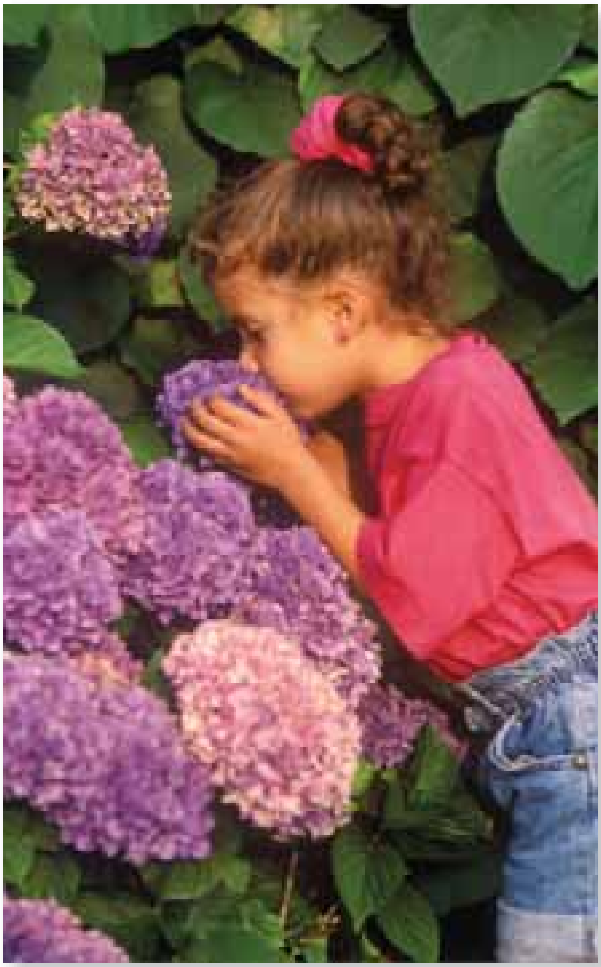
ap·peal *verb.*

areas Spaces or sections that are part of a larger place. *We took a trip to the wooded **areas** of Maine.*

ar·e·as *plural noun.* Plural of **area**.

aroma A pleasant or agreeable smell. *The flowers gave off a wonderful **aroma**.*

a·ro·ma *noun.*



assembled Brought or gathered together. *A crowd **assembled** for the concert.*

as·sem·bled *verb.* Past tense of **assemble**.

author A person who has written a book, story, play, article, or poem. *Peggy Rathmann is the **author** of* Officer Buckle and Gloria*.*

au·thor *noun.*

Bb

balance A safe position where something can't roll away or fall off. *I lost my **balance** while skiing and fell.*

bal·ance *noun.*

beasts Any animal that has four feet. *The zoo is home to **beasts** like giraffes and lions.*

beasts *plural noun.* Plural of **beast**.

beloved Loved very much. *The class pet was **beloved** by all the students.*

be·lov·ed *adjective.*

beware To be on one's guard; be careful. ***Beware** of speeding cars when crossing the street.*

be·ware *verb.*

beyond Farther on. *Look **beyond** the desert and you'll see the mountains.*

be·yond *preposition, adverb.*

blooming Having flowers. *The rose bushes will be **blooming** in June.*

bloom·ing *adjective.*

burrow A hole dug in the ground by an animal. *A gopher lives in an underground **burrow**.*

bur·row *noun.*

Cc

capital A city where leaders of a country or state work. *Washington, D.C. is the **capital** of the United States of America.*

cap·i·tal *noun.*

climate The usual weather conditions of a place or region throughout the year. *The desert's **climate** is much warmer than the tundra's climate.*

cli·mate *noun.*

collection A group of things gathered together. *The museum has the world's largest **collection** of dinosaur fossils.*

col·lec·tion *noun.*

combine To join together. *To make pancakes, **combine** eggs, flour, and milk.*

com·bine *verb.*

concern Serious interest. *We were full of **concern** for our teacher who was out sick for a whole week.*

con·cern *noun.*

conservation The wise use of the forests, rivers, minerals, and other natural resources of a country. *Water **conservation** is an important issue in many countries.*

con·ser·va·tion *noun.*

creating Causing something to be or happen. *The children were **creating** new paintings during art class.*

cre·at·ing *verb.* Inflected form of **create**.

cup A unit of measure equal to eight ounces. *Many cake recipes use a **cup** of water.*

cup *noun.*

Dd

democracy A government that is run by the people who live under it. *The United States is a **democracy**.*

dem·o·cra·cy *noun.*

deserted Not lived in or on. *The sailor was shipwrecked on a **deserted** island.*

des·ert·ed *adjective.*

design A drawing or outline used as a guide or pattern. *The architect's **design** for the museum was beautiful.*

de·sign *noun.*

destroy To ruin completely. *A hurricane can **destroy** a building.*

de·stroy *verb.*

devoured Ate or consumed. *The hungry teenager devoured the sandwiches.*

de·vour·ed *verb.* Past tense of **devour**.

directions Information or steps to follow about how to do something. *Follow the **directions** on the package to bake the muffins.*

di·rec·tions *plural noun.* Plural of **direction**.

discovered To have seen or found out for the first time. *Alexander **discovered** a rabbit hole in the backyard yesterday.*

dis·cov·ered *verb.* Past tense of **discover**.

distant Far away in distance or time; not near. *Some of our **distant** relatives live in Australia.*

dis·tant *adjective.*

Ee

endangered In danger of dying out. *Pandas in China are an **endangered** species.*

en·dan·gered *adjective.*

events Things that happen, especially things that are important to people. *I like to read about current **events** in the newspaper.*

e·vents *plural noun.* Plural of **event**.

exclaimed Spoken or shouted suddenly with strong feelings. *"I just won the game," Christopher **exclaimed**.*

ex·claimed *verb.* Past tense of **exclaim**.

extinct When a thing dies out and no more of its kind are living anywhere on Earth. *Dinosaurs are **extinct**.*

ex·tinct *adjective.*

Ff

familiar Known because of having been heard or seen before. *The actor on television looked **familiar**.*

fa·mi·liar *adjective.*

fetch To go after and bring back; get. *Please **fetch** two more plates from the kitchen.*

fetch *verb.*

figure A form, outline, or shape. *Each **figure** on the shelf is part of Mom's collection of bells.*

fig·ure *noun.*

footprint A mark made by a foot or shoe. *I left behind a **footprint** when I walked through the wet sand.*

foot·print *noun.*

forgetting Not being able to remember something. *Diego kept **forgetting** to bring his pet in for show-and-tell.*

for·get·ting *verb.* Inflected form of **forget**.

freezes Becomes solid because of cold. *When water **freezes,** it turns into ice.*

free·zes *verb.* Present tense of **freeze.**

Gg

gathered Brought together. *Carolina **gathered** together her favorite books to read on vacation.*

gath·ered *verb.* Past tense of **gather.**

glamorous Interesting, exciting, and charming. *The actor went to many **glamorous** parties.*

glam·or·ous *adjective.*

glanced Took a quick look. *The driver **glanced** behind her before safely changing lanes.*

glanced *verb.* Past tense of **glance.**

gleamed Glowed or shone. *The new bike **gleamed** in the sunlight.*

gleamed *verb.* Past tense of **gleam.**

goalie The player who defends the goal in soccer, hockey, and some other sports. *Our **goalie** made a great save at the end of the game.*

goal·ie *noun.*

grasslands Lands covered mainly with grass, where animals feed. *Scientists are trying to protect U.S.* ***grasslands.***

grass·lands *plural noun.* Plural of **grassland**.

Hh

habitats Places where an animal or plant lives and grows. *The natural* ***habitats*** *for penguins are South America and Antarctica.*

hab·i·tats *plural noun.* Plural of **habitat**.

handy Within reach. *Dad keeps his car keys* ***handy*** *in his front pocket.*

hand·y *adjective.*

hardest Needing or using a lot of work. *My* ***hardest*** *chore is cleaning out the garage each year.*

har·dest *adjective.* Superlative of **hard**.

Ii

imagination Pictures in a person's mind that are not real. *Ernesto used his* ***imagination*** *to create a new ending to the story.*

i·mag·i·na·tion *noun.*

imagine To picture a person or thing in the mind. *Try to* ***imagine*** *what cars will look like in the year 2050.*

i·mag·ine *verb.*

immense Of great size; very large. *Redwood trees can be* ***immense****, measuring more than 22 feet wide.*

im·mense *adjective.*

impossible Not able to happen or be done. *The snowstorm made it **impossible** to get to school today.*

im·pos·si·ble *adjective.*

information Knowledge or facts about something. *Where can I ask for **information** about the giant panda?*

in·for·ma·tion *noun.*

ingredients More than one of the parts that go into a mixture. *The **ingredients** in this salad are spinach, eggs, onion, and mushrooms.*

in·gre·di·ents *plural noun.* Plural of **ingredient**.

instrument **1.** A tool that helps a person do something. *The dentist used an **instrument** to scrape my teeth.* **2.** Something used to make music. *I have to decide which musical **instrument** I want to learn to play, the flute or the guitar.*

in·stru·ment *noun.*

interviewed Asked questions and wrote down the answers to find out information. *I **interviewed** the principal for the school newspaper.*

in·ter·viewed *verb.* Past tense of **interview**.

invent To make or think of for the first time. *It took Thomas Edison a long time to **invent** the lightbulb.*

in·vent *verb.*

itches Tickling or stinging feelings in the skin. *Martha rubbed her back against the wall to scratch her **itches**.*

itch·es *plural noun.* Plural of **itch**.

Jj

jabbing Poking with something pointed. *Jason moved his books so they weren't **jabbing** into his side.*

jab·bing *verb.* Inflected form of **jab**.

Ll

lengthy Being very long in distance or time. *The kangaroo made **lengthy** leaps to cross the field quickly.*

length·y *adjective.*

lunar Having to do with the moon. *My brother and I like to read about the astronauts' **lunar** landings.*

lu·nar *adjective.*

Mm

memories Persons or things remembered from the past. *My favorite **memories** from camp are playing soccer and swimming.*

mem·o·ries *plural noun.* Plural of **memory**.

menu A list of food offered in a restaurant. *Patricia likes to read the whole **menu** before choosing what to eat.*

men·u *noun.*

Today's Lunch
Sandwich
Salad
Corn
Peach Half
Milk

muscles Bundles of tissue that move certain parts of the body. *My aunt goes to the gym every day to keep her **muscles** strong.*

mu·scles *plural noun.* Plural of **muscle.**

Nn

nibble To eat quickly and with small bites. *A mouse will **nibble** cheese.*

nib·ble *verb.*

noble Impressive looking. *The **noble** lion stood proudly at the opening to the cave.*

no·ble *adjective.*

nocturnal Being seen or happening at night. *Bats are **nocturnal** animals.*

noc·tur·nal *adjective.*

Oo

occasions Important or special events. *Holidays are important **occasions** for my family.*

oc·ca·sions *plural noun.* Plural of **occasion.**

oceans Very large bodies of salt water. *It is possible to travel around the world by sailing over the **oceans**.*

o·ceans *plural noun.* Plural of **ocean.**

ounce A unit of measure for liquid. *This recipe calls for an **ounce** of vanilla.*

ounce *noun.*

Pp

planet A huge object that travels around the Sun. *Earth is a **planet** in our solar system.*

plan·et *noun.*

pleasant In a nice or friendly way. *The cab driver was **pleasant** to all his riders.*

pleas·ant *adjective.*

pollution Waste that harms land, water, or air. *People are trying to clean up the **pollution** in our oceans and rivers.*

pol·lu·tion *noun.*

powerful Having great power and importance. *The president is a **powerful** member of government.*

pow·er·ful *adjective.*

predict To use what you know to tell what will happen. *Scientists try to **predict** when an earthquake will happen.*

pre·dict *verb.*

preen To make oneself smooth or sleek. *Birds **preen** by washing and smoothing their feathers.*

preen *verb.*

prevent To keep something from happening. *A seatbelt will help* ***prevent*** *an injury in a car accident.*

prevent *verb.*

prey An animal that is hunted by another animal for food. *The spider traps his* ***prey****, a fly, in his web.*

prey *noun.*

prickly Having small, sharp thorns or points. *The cactus plants are* ***prickly****.*

prick·ly *adjective.*

products Things that are made or created. *The cans of food you buy in stores are* ***products****.*

prod·ucts *plural noun.* Plural of **product**.

promised Said that something will or will not happen. *I* ***promised*** *that I would clean my room.*

prom·ised *verb.* Past tense of **promise**.

puddles Small shallow pools of water or other liquids. *Our driveway has many **puddles** after a storm.*

pud·dles *plural noun.* Plural of **puddle**.

Rr

randomly Made or done by chance, with no clear pattern. *The teacher **randomly** called three students to the front of the room.*

ran·dom·ly *adverb.*

ranger's Belonging to a person whose job it is to protect a forest. *We used the **ranger's** truck to get to our campsite.*

ran·ger's *possessive singular noun*. Possessive of **ranger**.

remains Things that are left. *The explorers found the **remains** of an ancient building.*

re·mains *plural noun.*

roam To move around without any certain place to go. *My grandma likes to **roam** through the shopping mall.*

roam *verb.*

Ss

saddest The most unhappy. *Of my three friends, I was the **saddest** when our teacher moved away in the middle of the year.*

sad·dest *adjective.* Superlative of **sad**.

sanctuary A natural area where animals are kept safe. *The animals in the **sanctuary** are safe from hunters.*

sanc·tu·a·ry *noun.*

scent A smell. *The **scent** of roses filled the air.*

scent *noun.*

signal A way of showing people to do something. *A red traffic light is a **signal** to stop.*

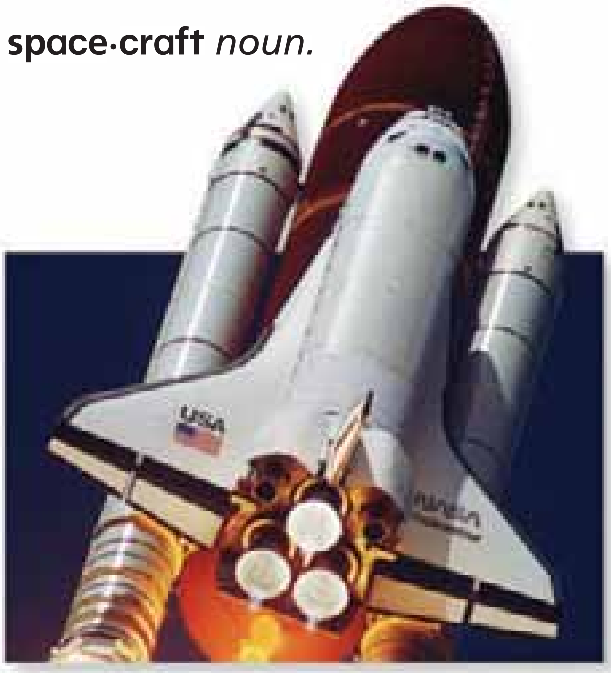
sig·nal *noun.*

simmered Cooked at or just below the boiling point. *The soup **simmered** on the stove all day.*

sim·mered *verb.* Past tense of **simmer**.

spacecraft A vehicle used for flight in outer space. *Astronauts use **spacecraft** to explore the moon.*

space·craft *noun.*



surface The outside of a thing. *The **surface** of a basketball is bumpy.*

sur·face *noun.*

Tt

tablespoons Spoons that are used to measure food. *We need three **tablespoons** of vinegar to make this sauce.*

ta·ble·spoons *plural noun.* Plural of **tablespoon**.

talent A natural ability or skill. *Clara has a **talent** for drawing realistic pictures.*

tal·ent *noun.*

temperature A measure of how hot or cold something is. *You can find the **temperature** by using a thermometer.*

tem·per·a·ture *noun.*

trade The giving of one thing in return for something else. *Swapping an apple for an orange is a fair **trade**.*

trade *noun.*

treasures Money, jewels, or things that are worth a lot or have meaning. *Scientists discovered **treasures** in the ancient tomb.*

treas·ures *plural noun.* Plural of **treasure**.

trouble A difficult or dangerous condition. *We'll be in a lot of **trouble** if we don't complete the assignment.*

trou·ble *noun.*

Uu

uprooted Torn or pulled up by the roots. *A bulldozer **uprooted** trees and bushes.*

up·root·ed *verb.* Past tense of **uproot**.

Vv

vast Very great in size. *Our tiny ship sailed across the **vast** sea.*

vast *adjective.*

vendors People who sell things. *The fruit **vendors** were selling apples, bananas, and oranges.*

ven·dors *plural noun.* Plural of **vendor**.

violent Happening with or because of a strong force. *The **violent** earthquake destroyed many homes.*

vi·o·lent *adjective.*

visible Able to be seen. *My house is **visible** from the street.*

vis·i·ble *adjective.*

voyage A long trip by water, over land, or through space. *An ocean **voyage** can take more than a week.*

voy·age *noun.*

Ww

warning Notice about a danger. *The sign was a **warning** that the road curved sharply ahead.*

warn·ing *noun.*

watch **1.** To look at something or someone carefully. *Leslie likes to **watch** her baby brother play with his toys.* **2.** A small clock worn on a person's wrist. *Carlos checked his **watch** to make sure he wasn't late for practice*.

watch *verb.*

watch *noun*.

wider Covering a larger area from side to side. *Some aisles in the supermarket are **wider** than others.*

wi·der *adjective.* Comparative of **wide**.

wiggled Moved from side to side in short, sudden movements. *I **wiggled** my loose tooth.*

wig·gled *verb.* Past tense of **wiggle**.

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